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A TEXT-BOOK OF INSANITY

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BY

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Dedication.

TO

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REGIUS PROFESSOR OF PHYSIC IN THE UNIVERSITY OF CAMBRIDGE

IN RECOGNITION OF HIS EFFORTS

TO PROMOTE THE SCIENTIFIC STUDY OF INSANITY

DURING HIS TOO BRIEF TENURE OF THE OFFICE

OF

COMMISSIONER IN LUNACY.

PREFACE.

YEAR by year the students to whom I lecture ask me what book on insanity they ought to study, and year by year I have to recommend books which I know to be excellent in themselves, but which I feel are of such bulk and volume as to be out of proportion to the time which students can profitably give to an outlying subject, and to the vast mass of other material which they have to assimilate during their brief curriculum. Before that important event which took place in the year B.C. 2348,* medical students might have spent forty or fifty years in preparing for examination, and have looked forward to commencing practice when they were entering their second or third century, but nowadays it seems incumbent upon their teachers to avoid discursiveness, and I think that our knowledge of insanity has reached a point at which its various forms and varieties, like those of bodily disease, can be described as types, without having recourse to descriptions of illustrative cases, which bulk so large in most text-

* According to Ussher, but the Septuagint has it B.C. 3246.

books on the subject. Moreover, I was anxious to put forward the distinction that I have drawn in this book between forms of insanity and varieties of insanity, a distinction which I think goes far to solve the difficulties of classification which have been so great a stumbling-block to successive writers on insanity for generations.

In giving a preliminary sketch of the normal processes of which insanity is the disorder, I have followed a course which is very unusual, but which I have pursued for many years in lecturing on the subject, and have found to be a very useful foundation on which to build a knowledge of insanity. Special stress is laid upon observation of conduct, which is in my opinion the key to the subject. The causes of insanity have also been separately dealt with, and as I hold that there are not insanities, but insanity only, this course is at once convenient and logical.

C. M.

Flower House, Catford.

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INTRODUCTION.

When the student of medicine passes to the study of insanity, he crosses a scientific frontier, and enters an entirely new province of knowledge. Hitherto his purview has been limited to the processes that go on within the body, and whatever references he had to make beyond that field were indirect and of secondary import. He needs to know the structure and functions of the several organs of the body, and, when any function is disordered, his calling is to take measures to readjust the bodily processes to one another so that they may work in harmony again. He has, in short, to maintain the organism in a fit state to do its work, whatever that may be, but with the doing of the work he has no concern. What the work may be, and with what efficiency it may be performed, is no concern of his, except in so far as these things may affect the general capability of the organism to continue its existence. His position towards the patient is the position of the shipwright and the engineer towards the vessel on which they are engaged. Like them, he must be thoroughly acquainted with the structure and function of every part, and, like them, he must be upon the watch to repair the structure and correct the function, when the one is damaged or the other is at fault; but with the ship's course he has nothing to do. That is a matter

altogether beyond his province. When the student oversteps the bounds of medicine to enter upon the study of insanity, he leaves the engine-room for the quarter-deck. He is no longer directly concerned with the integrity of the structure or the efficiency of the engines. His function now is to set the ship's course, to note the way in which she comports herself in wind and weather, to study charts and tides, stars and clouds, to watch the barometer and to sound the lead, and generally to relinquish the observation of the ship herself, and to take up that of her relations to the world in which she moves. This is the function of the student of insanity—to study the individual, not *per se*, or *simpliciter*, but in relation to the world in which he exists, and in which he has to maintain his existence.

Insanity is often called disorder of mind, and this it is, but it is much more than this. Were it disorder of mind alone, we should not be called upon to treat it; for we should know nothing about it unless we happened to be subject to it ourselves. What goes on in the minds of other people we can never know, unless and until it is revealed to us by their conduct. Only by disorder of conduct can we infer the existence of disorder of mind, and when conduct is disordered, we may safely and immediately infer, we are irresistibly compelled to infer, the existence of insanity, without stopping to investigate the condition of the mind. If a general officer goes on parade in flannels and practising the banjo; if a parson goes into the pulpit and plays cup and ball before the congregation; if a hostess comes down to a dinner party in her nightdress and curl-papers; if a smith pulls a glowing horse-shoe out of the fire with his naked hand; if a

navvy tries to break up the road with a saucepan ; we do not need to sit down and investigate the state of their minds before we pronounce them insane ; the state of the mind is left on one side and does not enter into our consideration. We say at once that such conduct is itself insane, and needs no further evidence to establish the insanity. It is true that there are cases, many cases, in which we do investigate the state of mind, and in which we should not pronounce an opinion on the sanity or insanity of the patient until their mental condition had been investigated ; but these are cases in which a portion, it may be a very large portion, of the conduct exhibits no disorder ; in which the disorder of conduct is only occasional, and affects only a small, though it may be an important, department of conduct ; and in which we have, perhaps, no opportunity of witnessing any disorder of conduct. In such cases we investigate the state of mind in order to discover whether conduct is likely to exhibit disorder ; and it is an index to the likelihood of disorder of conduct, not as in itself exhibiting disorder, that disorder of mind is important. If we discover a disorder of mind that has no influence upon conduct, we cannot regard it as an indication of insanity.

Mind and conduct are not the only things disordered in insanity. The former is a sign, the latter is a symptom, of disorder of the highest nerve processes, whose function it is to actuate conduct, and whose activity is the condition under which mental states arise. These highest nerve processes have a double function. Not only do they actuate conduct, and thereby regulate the whole of the commerce between the organism as a whole and the universe which

environs it, but they regulate also the whole of the internal processes of the body with respect to one another, harmonise and balance and preserve due relations amongst them. When the highest nerve processes are disordered, therefore, there is disorder among these bodily processes—disorder which is often inconspicuous, but which, in the deeper degrees of insanity, is often very pronounced, and exhibits itself in anomalies of skin, hair, nails, sweat, etc.—superficial and conspicuous examples of a disordered metabolism which is doubtless present in the deeper tissues also.

Conduct, however, is the main thing that is disordered in insanity. It is disorder of conduct that gives to insanity its whole significance. Disorder of mind without disorder of conduct, if it were possible, would be unimportant; if it were important, would be unrecognisable; and thus the first essential to a knowledge of insanity is an enumeration of the main features of conduct, and of the ways in which conduct may be disordered.

PART I.

THE INSTITUTES OF INSANITY

CHAPTER I.

CONDUCT.

CONDUCT is the pursuit of ends; and an investigation into the several activities that together constitute conduct resolves itself into an analysis of the ends which mankind pursue, and the apportionment to each of its relative importance.

The outcome of the stupendous biological discoveries of the latter half of the last century is to show that all life is teleological, and that the great and ultimate end to which all life is directed, towards which every living being strives, for which every living being exists, and to which all other ends are but means, is the continuation of the race to which the individual belongs. To each individual, life is not a gift but a trust, to be employed in transmitting life to a new generation; and, this purpose effected, the *raison d'être* of the individual is at an end. This is very clearly indicated in the lives of many of the lower animals, in which reproduction is followed at once by death. Hence the whole scheme of existence centres around the reproductive function, and the first, the greatest, the most important, the most fundamental group of activities of which human, in common with all other living, beings are capable, consists of those

which directly subserve the reproductive function; activities which in mankind begin with the first approaches of courtship, and do not cease until the last child is established in the world, and capable, in its turn, of handing on the sacred fire of life to a succeeding generation. The reproductive activities fall naturally into three groups—those of courtship, of reproduction proper, and of parentage.

The activities of courtship need not detain us, since they are not very important, and are but little liable to disorder. We witness in them, however, the same curious phenomenon of reversal that we shall have to notice in the manifestation of other instincts; that is to say, we witness conduct directed, not to the attainment, but to the defeat, of the instinctive end. We see women, instead of decking themselves in colours and endeavouring to make themselves attractive by becoming costume, assuming the trappings of a nun, and adopting elaborate devices to make their appearance repellent.

The reproductive function proper is subject to several morbid aberrations. The commonest of these is masturbation, to which a great deal of factitious importance has been ascribed. There are few diseases of the nervous system whose causation has not at one time or another been attributed to masturbation, and, in insanity, both the physician and the patient are accustomed to regard it as a factor of the greatest importance. It is probable, however, that its share in the production of insanity has been much exaggerated. As far as it is possible to judge, it seems most likely that very few lads pass through the period of adolescence without sporadic and occasional indulgence in this vice; and it is certain that in many cases it is

practised with considerable regularity and frequency without producing insanity. There is no doubt that it is practised before the outbreak of the insanity by a considerable proportion of those who become insane, and by all who become insane before the age of twenty-five; and although it has unquestionably an influence, varying with the person by whom, and with the extent to which, it is practised, in precipitating the outbreak and increasing its severity, yet it is to be regarded upon the whole rather as a symptom than as a cause of insanity in such cases. The excess with which it is indulged in is due to that inherent lack of self-control which is an inseparable part of insanity, and which is so often conspicuous in its early stages.

Perversion of the sexual passion, or its direction towards abnormal objects—towards the same sex, for instance—and its gratification in abnormal ways—with accompaniments of brutality and blood-thirstiness—are subjects which have of recent years been treated by certain writers with a lingering solicitude and a minuteness of detail out of all proportion to their importance. It is true that cases of such perversion are not extremely rare, but they are not usually attended by any other symptom of insanity, and the question whether this perversion in itself constitutes insanity is one which can scarcely be considered here at length. It is certainly not so in law, and the abnormal gratification of the sexual passion being a criminal offence, the persons who are addicted to these practices are convicted and sentenced as sane people at every session of the Central Criminal Court, excuse or mitigation of the offence, upon the ground of the insanity of the act, being unknown.

Disorder of parental conduct is not infrequent.

Among the lowest class of the population in large towns the obligations of paternity are frequently neglected or altogether ignored; and the occasional desertions of infants and young children are instances of defect in maternal conduct, defects which are sometimes paralleled by parents in higher social strata. Excess of parental solicitude, to the extent that the health of the parent is damaged, and even the life sacrificed, by devotion to the offspring, is not very uncommon, but is not a wide departure from the normal, for parenthood of necessity implies self-sacrifice. Nor can that diversion of the parental instinct which leads an old maid to lavish attention upon a pug-dog, a cat, or a canary-bird, in the absence of any more appropriate object, be looked upon as abnormal. There are, however, perversions of the parental instinct which evince manifest disorder. Chief of these is the rage of destruction, directed against the new-born offspring, which is such a frequent and terrible feature in the insanity of child-bed. It is remarkable that this reversion of the parental instinct occurs in connection with parturition among the lower animals also. Dogs, pigs, and rabbits frequently kill and devour their new-born offspring; and ewes will often repel, and leave to perish of starvation, the weaklier of their twin lambs. The parallelism does not explain the occurrence, however, though no doubt it indicates the direction in which an explanation is to be sought, and at present this strange aberration of conduct remains inexplicable.

Next in importance to the reproductive activities are the directly self-conservative—those activities whose performance is necessary to the maintenance of life from hour to hour and from moment to moment—those by which obvious physical dangers

to life are averted. These are the activities by which an individual avoids falling into pits; collisions with moving, and eke with stationary, objects; falling into fire or water; drinking scalding fluids; running into dangers of ferocious or poisonous animals; and, generally, those obvious dangers which prohibit us from leaving young children without supervision. Defect of the activities of this class is presented by all young children, and in them the defect is normal; but when it is prolonged beyond the stage of childhood, the defect is morbid, and is characteristic of that class of the insane that is connoted by the term "idiot." Defect of these activities is not always original. It may be acquired. While idiots never attain to the degree of intelligence that enables them to guard themselves against these obvious dangers, there is another large class of the insane who have acquired the activities of this class in full, but who have subsequently lost them, and these activities are among the last to be lost in the deeper degrees of dementia. Deeply demented persons, no more than young children, can safely be trusted to be alone. They are apt to fall downstairs; to set their clothes on fire; to lie naked and shivering with cold, for want of sense enough to pull the bedclothes over them; to trip over steps, or buckets, or what not, and fall; and to incur in other ways dangers that arise from want of the simplest care and forethought.

Among these primitive modes of activity, which are acquired at a very early age and are lost only when the later stages of dissolution are reached, is that which mankind shares not only with the great majority of mammals and birds, but with bees and ants and other social insects, of depositing his excrement at a

distance from his habitual haunts, and in such a manner that it shall not soil his person and render it offensive to his fellows. This mode of conduct is very often defective in insanity, and very often affected out of its turn, as it were, and at a much earlier stage of dissolution than we should expect. It is common to find insane persons in good physical health, capable of acts of considerable elaborateness, able not only to feed themselves, to undress themselves, to converse with some intelligence, to find their way from place to place in their customary abodes, who yet, without any paralysis of sphincters, pass their water and motions under them as they sit and lie. Considering at what a very early stage of development this faculty is attained, it is remarkable that it should so often be lost long before other faculties of much later attainment; and its loss is very significant and of very unfavourable import. Whatever the form of the insanity, an insane person who lapses from cleanliness in this respect very rarely recovers. Usually the first appearance of this symptom marks the beginning of the end. In acute cases it very often means that the patient is going to die; in chronic cases it means that he is settling into hopeless dementia.

This phase of conduct is susceptible not only of defect, but of perversion. There are many insane persons who not only soil their clothes with their fæces, but who revel in paddling in their filth. They wash their hands in it; they knead it; they take it in their hands and plaster it about the walls and furniture of their rooms, on their persons, on their faces, and in their hair. Such reversal of the ordinary normal conduct of mankind is difficult to account for,

but though it is not in all cases explicable, there are many in which an explanation can be conjectured. There are some lunatics who are so lazy, whose detestation of distasteful exertion is pushed to such an extreme, that they will wet the bed from sheer dislike of the trouble of getting out to make water. Others there are who are possessed by an impish spirit of malignity, and whose desire to give trouble and to outrage the feelings of those around them will manifest itself in this way; and finally—it is an extraordinary fact, but one that cannot be doubted by those who have had much experience of the insane—that in some cases pleasure of a sexual character is derived from these practices, and they are undertaken with that end in view.

The other directly self-conservative activities are likewise frequently perverted, and even reversed. Instead of conduct being directed to the preservation of life and the quest of pleasure, it is directed by a fury of self-destruction and an unquenchable desire for the self-infliction of pain and suffering; and one of the commonest of the forms which is exhibited by the perversion of the self-conservative activities is the unwillingness, often amounting to obstinate refusal, to take food. The refusal to eat may be due to a conviction that all the food is poisoned, or it may be deliberately adopted as a suicidal expedient; and both of these motives are frequent. But more often it is exhibited by patients who have not sufficient intelligence to form either the hypothesis or the intention, but in whom it is part of a brutish resistiveness which leads them to oppose every mode of activity that is proposed to them. They struggle against being fed with the same mulish obstinacy that

they struggle against being dressed, against being undressed, against being sat down or stood up, against walking about, against standing still, against every form of activity that they are desired to undertake; and their struggles are varied by endeavours to injure those who have care of them. The conduct that they exhibit reminds us, on the one hand, of a wild animal that resents its capture, and on the other of a jibbing horse; and its only plausible explanation is to regard it as a resuscitation of such obsolete instincts as these.

The craving for suicide and self-injury exhibits itself in many other ways besides that of refusing food, and perhaps its commonest expression is in a leap from a window. Persons without experience of insane people usually consider that if a window is shut and fastened so that it cannot be opened, the precaution against a suicidal leap through it is complete; but a patient who is determined upon suicide takes no account of the obstacle of a mere pane of glass, and will jump through a shut window as readily as through an open one. The craviug for suicide often exists without the pluck to carry the intention into execution, and even among the insaue, many are saved from suicide by the lack of courage; but, on the other hand, in many cases the determination is so fixed and obstinate that the most unlikely means are employed for the purpose, the greatest ingenuity and industry are exercised in finding an opportunity, and nothing but unceasing vigilance will suffice to prevent the act. A fragment of cup or tumbler, of window-pane or chamber-pot, will furnish a cutting instrument which will serve to open a vein or an artery. A ligature will be found in a garter, an apron-string, a shred of clothing or sheet, or of

unravellings twisted together to form a string. A couple of inches of water in a ditch or bath will suffice for drowning; the back of a chair or the rail of a hedstead is high enough for a gallows; a handkerchief squeezed into a ball may be stuffed into the throat; petroleum, or furniture polish, or anything that seems nasty and unwholesome, may he swallowed; and thus the resources of the would-be suicide are always at hand, and the only efficient preventive is incessant and vigilant watchfulness.

Short of suicide, the melancholic, who is deeply impressed with his own unworthiness, will endeavour to diminish and obviate his comfort as far as he can. If he will eat food at all, it must not be savoury or daintily served; his bed must be hard, his clothing coarse, his occupation distasteful. He insists upon a morbid and unreasoning asceticism.

The third class of activities of which conduct is made up comprises those which Spencer has termed indirectly self-conservative—those by which the livelihood is earned and the means are administered; and these also are often defective and sometimes perverted. When defective, the defect, as in the previous class, may be either original or acquired; the activities may never have been attained, or, once attained, they may be lost.

Original defect of the indirectly self-conservative activities is seen in two forms: the first, in which the general level of intelligence is low, and the defect is hut a part and a manifestation of a general defect implicating all forms of conduct; the second, in which the defect is either confined to this particular division of conduct or is in it much more pronounced than in any other, the remaining divisions being comparatively complete

and the general level of intelligence up to the normal. The first of these classes is constituted by the imbeciles, by those who attain to the directly self-conservative activities, but fail to progress further; or who attain to some degree of conduct of this second class, but who can never attain to the skill in any occupation that is necessary to give their labour sufficient market value for their support. They can do simple work, but they cannot, unless carefully supervised, do even the simplest work without making such blunders as deprive the work of all value; and when the cost of the supervision is deducted from the value of the labour, the balance is too small for them to live on. If they are set to weed a garden, they will pull up weeds and valuable plants indiscriminately; if they are set to beat a carpet, they will vigorously beat it into a hole at one spot and leave the remainder untouched; tools they will either break or injure themselves with; letters they lose, or deliver to any one but the addressee; and so forth.

Inability to earn a living may be due to a totally different defect. To earn a livelihood requires moral as well as intellectual qualities. It needs steady industry. It requires such self-control, such self-denial, such a degree of self-abnegation, as will allow of the steady pursuit of an uninviting and perhaps repellent employment, in spite of the solicitation of others by which immediate pleasure may be gained. It means, in short, the postponement of immediate pleasure and the suffering of immediate pain, for the sake of greater pleasure to be enjoyed in the future. And this ability of self-control differs very widely in different people, and is by no means a function of the intellectual ability. Either may be highly

developed while the other remains distinctly below the average; and we frequently meet, on the one hand, with stupid people whose sense of duty is highly developed, and in whom self-control increases into self-denial, and self-denial is pushed to asceticism; while, on the other hand, it is as frequent to meet with clever people, persons of nimble intellect and many accomplishments, who are so deficient in this moral quality that they are incapable of continuing any mode of occupation after it has ceased to be pleasant and congenial to them. Such people are deficient in the activities of the class now under consideration. They are incapable of earning their livelihood, and incapable by reason of a defect, which we may term mental or moral as we choose, but which is a defect, not in the direction of idiocy or imbecility, but of a totally different kind.

The ability to administer the means, when gained, is of equal and even of greater importance than the ability to earn a livelihood; for, while the first is obligatory upon every one, there are many people who are relieved by the exertions of their predecessors from all need to earn their own livelihood. Defect in the administration of the means may take either of the forms exhibited by defect in the earning of the livelihood. It may be due to general defect of intelligence, so that the subject of it is unable to appreciate the amount of his income, unable to grasp the relative values of different commodities, unable to appreciate the different purchasing power of different sums of money; so that he is at the mercy of any dishonest person who chooses to ask him half a sovereign for an ounce of tobacco or a box of matches, or to palm off upon him a German lithograph as a genuine Raphael,

a broken-winded screw as a certain winner, ormolu and glass as gold and diamonds; so that he expends his income and sinks into debt from sheer inability to appreciate the relation between income and outgo. Few persons are brought to ruin by this defect, however, for it is recognised in early life, and they are usually made wards of court before they come of age, so that the administration of their means is never in their own control.

But the next defect is a very frequent one, and brings scores of spendthrifts to ruin every year. It is the moral defect of inability to postpone immediate pleasure for the sake of a greater future benefit. The spendthrift knows and appreciates the amount of his income; knows that the rate of his expenditure cannot be maintained without inroad upon his capital; knows that he is living at a rate at which his capital will be exhausted in a few years; and yet the prospect of certain ruin is insufficient to check his immediate indulgence.

Allied to this defect is that which is known in Scotch law as "facility"; that which is characterised by an inability to say "No"; and this defect may be original or acquired. Often it is congenital. There are very many persons of weak character who are unable to withstand solicitation, who give to every beggar and lend to every "sponge" money which they know they cannot well afford, from lack of the moral courage, force of character, or strength of will to refuse. These are the people who are ruined by endorsing bills and becoming security for their friends. Again, there are people who, while in the vigour of health, are able to repudiate such proposals, but who weakly accept them when enfeebled by illness or in the

decay of old age. These are the people whose wills are disputed upon the ground of undue influence, who make wills or deeds of gift in favour of their nurses or landladies, to the exclusion of their own near relatives.

The administration of the means may be perverted. The instinct of accumulation may be present in such excess that expenditure is grossly inadequate. A man who is well able to afford a house and a decent establishment will live in a single room, cook his own food, go without such decencies of life as table-linen, carpets, clean crockery, or change of clothes, deny himself the use of artificial light, restrict to a dangerous extent his fire, live a stranger to soap, comb, blacking, and clothes-brush. When economy is pushed to such a degree of miserliness as in the cases of Daniel Dancer and John Elwes, the perversion of conduct in itself constitutes insanity.

The next class of activities are those by which the individual maintains his relations with the community to which he belongs, and these, like other activities, are susceptible of defect and perversion.

Communities exist by virtue of the self-restraint of the component individuals, by which self-regarding activity is limited so that the activities of the other members of the community shall have free play within similar limits; and in order that the community may hold together and continue, each individual must do things for the commou welfare which, if he lived in solitude, he might without detriment leave undone. When he lives in a community, he must so restrain aud regulate his activity as not to impair, nor even to jeopardise, the safety, the property, and the self-respect of his neighbours; and more than this, he must take his share of the common burdens. He must

contribute to its security and defence both from internal and external dangers; he must contribute to its solidarity and cohesion, not only by abstinence from disintegratory conduct, but by an active execution of such deeds as draw closer the bonds of fellowship and knit more securely the strands of society. He must abstain from violence, dishonesty, and slander; and, above and beyond this abstinence, he must exercise self-restraint in those hundred little ways by which the conduct of a person in the presence of others is shorn of indulgences which he allows himself when alone. He must pay taxes, serve on juries, and contribute by similar exercises to the common welfare; and, in addition to this, he must perform those acts of ceremonial and small benevolence which, under the name of politeness and courtesy, diminish repulsion and increase cohesion among the units of which the society consists. Thus each form of conduct, whether inhibitory or active, is divisible into a major and a minor section; and while the opportunities and occasions for the exercise of the activities of the major section are comparatively infrequent and few, the opportunities and occasions for the exercise of the minor activities are frequent and, so long as the individual is in the presence of his fellows, continuous. Each major section may be dealt with separately, while the minor may be considered together.

The exercise of self-restraint, when it is directed to the forgoing of whatever advantage may be gained by injuring others in person, or property, or feeling, is termed "morality"; and the doing of such injurious acts is "immorality," and may or may not be crime, according as it is or is not punishable by law. Immorality and crime, while they are disorders of conduct in the sense

that they are departures from what the universal consent of mankind admits that conduct ought to be, are not necessarily disorders in the sense that they partake of the nature of insanity. They may be sane or insane according to circumstances, and the reader who is interested in the circumstances which distinguish the sane from the insane variety of immorality and crime should consult the article on "Vice, Crime, and Insanity" in Clifford Allbutt's "System of Medicine."

The ability to serve the community in active ways, whether by partaking in its defence against internal or external foes, or by undertaking municipal or political duties, is precisely the same kind of ability as is required for the furtherance of the welfare of the individual himself, and the same act which is undertaken for the one end often serves the other; so that no separate treatment of the defects and disorders of this division of conduct is needed.

It is in the minor activities of social life, in matters of politeness, of convention, of ceremony, of courtesy, that defect and disorder of conduct first exhibit themselves in those cases in which insanity comes on slowly, or in which it does not advance far. As these are the latest activities to be acquired, so they are the earliest to decay in those cases in which an order of decay can be discerned. When the defect of conduct is merely quantitative—when, that is to say, there is a general diminution of the amount of energy available for expenditure in conduct, as in the gradual advance of age—then defect is first and most perceptible in those forms of conduct that demand for their actuation the largest amounts of energy, and activities are abandoned in the order of the vigour which they need

and of the fatigue which they entail. Athletic exercises, jumping, running, climbing, rowing, and so forth, are the first to go; and the acts of politeness and courtesy which make so small a demand upon vigour and energy are retained to the last. But when, as in insanity, conduct suffers what may be termed a qualitative defect—when activities are lost without respect to the amount of energy needed for their execution, but in the inverse order of their acquirement—then these little offices are the first to show defect. In a large proportion of cases of iusanity defect of these qualities is unnoticed, for the insanity comes on so rapidly that the more fundamental and important activities of self-conservation are reached at the outset, or very early in the course of the malady; and the disorder or defect of these is such an important and such a conspicuous factor in the case that the loss of the others passes unnoticed. When a house is shaken by an earthquake, we are too apprehensive of the collapse of the roof and walls to notice the breakage of the crockery. Thus it happens that, in a large proportion of cases of insanity, defect and disorder of these qualities do not need to be considered. But there is a numerous and very important class of cases—cases that are the most difficult of all to deal with in practice—in which these minor activities alone exhibit disorder, and then it is often difficult to recognise that insanity exists; difficult, when one has satisfied oneself, to convey the conviction to others; and often impossible to establish a sufficient degree of insanity to set the law in motion and sequestrate the individual from the management of himself and his affairs.

When the minor social activities are disordered, then the minor activities among the self-conservative

and reproductive activities are usually disordered along with them; and disorder of the whole group of minor phases of conduct may now be considered together.

The beginnings of insanity, when insanity begins slowly, are often very slight. The irritable man shows such an increase of irritability as makes his family stare; the talkative man monopolises conversation more completely than usual; the uxorious man becomes even more demonstrative; the egotist brags more audaciously; the querulous complains more bitterly; the moody man has longer and more frequent periods of deeper gloom; any little peculiarity of conduct which is native and not assumed becomes exaggerated. In this stage insanity is not recognised; indeed, in this stage insanity does not exist. It needs a wider departure from the normal to justify us in diagnosing insanity, but yet this is the beginning of the malady; the difference between this state and recognisable certifiable insanity is a quantitative difference, a difference of degree only, and a further advance of the malady is marked at first by an exaggeration of the same defects.

But if the most conspicuous features in the man's normal conduct were artificial and assumed, if they were the expression, not of deeper and more fundamental peculiarities of nerve structure, but of characters of late acquirement, and therefore of little fixity and endurance, then the mark of the onset of insanity is a "change in the nature" of the man, and the change is always in the direction of degradation. The kindly and forbearing man becomes irritable and quarrelsome; the reticent man becomes expansive, and expatiates to strangers and servants upon the misdeeds of members of his family; the refined and

gentlemanly man consorts with artisans and labourers and frequents low public-houses; the man of cleanly life visits brothels, and chums with loose women; the cautious, prudent man of business launches out in wild speculations; the modest, retiring man thrusts himself forward into all kinds of society, writes long and familiar letters to persons with whom he has only a bowing acquaintance, asking favours, offering benefits, and making appointments; the parsimonious man becomes lavish, and the generous man parsimonious.

In this early stage of the malady no intellectual defect may be apparent, or if there be any intellectual defect, it is displayed only in the inability to recognise and realise the impropriety of the conduct. If you remonstrate or reason with him, you will be astonished at the astuteness with which he justifies and accounts for his conduct. You adduce instances of his irritability and quarrelsomeness, and he admits that he lost his temper, but, then, consider the provocation! and he gives you an account of the incident, not wilfully garbled, but highly coloured, and such as, if you admit that it appeared so to him, you must admit that his retaliation was not excessive. Does he consort with labourers in low public-houses? He was unable to sleep, and at four o'clock on a summer morning he dressed and went abroad. He has always been interested in the lives of the labouring class, has held night-schools for them, and started slate clubs, and so forth. On this morning he met some of his former pupils going to their work, and naturally began to talk to them; the conversation became so interesting that he accompanied them to the house where they took their breakfast, and then could do no less than stand them beer all round. Tell him that he is

squandering his means, and he will almost convince you in spite of yourself that his expenditure was justified; that, in the first place, he could afford a flutter; and, in the second, the chances of success in his venture were so great as to justify the speculation.

Disorder of other divisions of conduct is scarcely of sufficient importance to need separate consideration. Defect of religious conduct is common enough without carrying with it any implication of insanity; but excess and disorder are occasionally seen, and are more decidedly abnormal. When a girl passes whole days and nights upon her knees in prayer, and cannot be prevailed upon to rise, even to eat and drink, or to take her fair share in the duties of the household; when a youth enters his father's office, harangues the assembled customers upon their sins, prays aloud for them, and finally dismisses them with his blessing; the morbid degree of the excess is no longer in doubt; but such disorder of the religious portion of conduct is rarely the most important, is rarely even the most conspicuous disorder. It is not so much the time spent in prayer as the neglect of all other and more urgent duties that is the important disorder in the first case; it is not so much in the second case the prayer, as the inability to appreciate the inappropriateness of his conduct, that is the important element in the conduct of the youth.

CHAPTER II.

MIND.

ALTHOUGH, as has been said, insanity is not exclusively, nor even primarily, a disorder of mind, yet mind is always disordered in insanity, and no account of the preliminaries or institutes of insanity would be complete in which the constitution and the disorders of mind were ignored.

It has already been pointed out that life is essentially and necessarily teleological, the prime purpose of every living thing being to continue the existence of the stirp to which it belongs; and corresponding with this central fact in conduct is the central factor in mind, which we denominate desire. Desire of reproduction, the sexual attraction, the craving for maternity—these are the foundations of the human mind, and to them all other mental states and processes are subservient and contributory. Reproduction cannot be effected until maturity is attained, nor can the offspring be nourished and provided for unless the life of the parent is preserved unimpaired; and hence, growing out of the primordial desire of reproduction, is the desire of self-preservation; and from this stock, again, arise many subordinate desires. The competition of the human race with its environment, both organic and inorganic, and the competition

of individuals of the human race *inter se*, has eventuated in the aggregation of individuals into communities; and the exigencies of social life have given rise to a large group of important desires, whose action is to conserve and consolidate communities; and these constitute another stock, out of which many subordinate desires arise.

Living, as he does, in a world of moving objects, and being himself endowed with motion, man is constantly receiving motion from without and emitting motion from within. To each of these factors in experience a mode of consciousness corresponds. With the reception of motion occurs sensation; with the emission of motion occurs volition. Motion is neither received nor emitted at random. By the organs of sense certain modes of motion are filtered out from the rest, are, where necessary, magnified and intensified, and are discriminated into innumerable shades; and those sensations occupy the largest share of consciousness whose corresponding modes of motion are the most important to us, as giving us intelligence of those occurrences in the outside world which most affect our welfare. And when motion is emitted, it is emitted, not at random, but in such combinations of movement as are best adapted to secure benefit from the circumstances that are made known to us by sensation. So that between reception and emission there is of necessity an internal rearrangement or redistribution of the streams of motion, such that the emitted motion is adapted to the circumstances disclosed by the received motion. This redistribution of motion is the physical substratum of thinking. The altered disposition of tissue that results from the redistribution of motion endures,

and this endurance of structural alteration is the physical basis of memory.

These, then, in brief, are the faculties or divisions of mind whose disorders we have to examine—desire, sensation, thought, volition, and memory. Of these, desire need not detain us, since it is so closely determinant of conduct that a consideration of its aberrations would be a repetition of the previous section. Neither need we consider the disorders of sensation, since these, by common consent, are matters not so much for the psychologist as for the physiologist. There remain the disorders of thought, volition, and memory.

The most rudimentary form of thought is the process of perception, by which a cluster of remembered sensations is added to, and grouped around, a presented sensation, in such wise that the whole forms the percept of an object present to sense. To the visual sensation of a patch of greenish-yellow colour of varying shade are added the remembered qualities, previously experienced in connection with similar appearances, of size, shape, solidity, weight, fragrance, smoothness, and so forth, together with the remembrance of the sound "apple"; and the whole of these memories, when combined with the presented sensation of the patch of colour, make up the percept of the apple. The process thus characterised is liable to three modes of error.

(1) In the first place, the presented sensation may fail to suggest the remembered sensations, or some of them, and the object may not be perceived for what it is. The appearance of steam rising from the surface of water has always in experience been associated with a high temperature of the water, and

this appearance, when presented, ought to arouse the remembrance that the water is hot. But in cases, for instance, of deep dementia, the presented sensation fails to arouse the associated memory; the patient fails to perceive that steaming water is hot, and scalds himself in consequence. Such a defect of the process of perception may be termed imperception.

(2) In the second place, the presented sensation may arouse a cluster of memories, but the qualities thus remembered, and combined with the sensation into a percept, do not, in fact, inhere in the object perceived. I see a piece of cord lying on the floor, and to the sensation which this object presents to my sense I add the qualities of spontaneous movement and of life, and the aggregate of these memories make up the percept, not of a piece of cord, but of a snake, and I perceive a snake wriggling on the ground, where in fact there is nothing but a length of cord. Or the wind blowing through the telegraph wires produces aerial vibration, which impinge upon my ear and arouse in me a sensation of sound; to this sensation I add memories of articulated words and of their meaning, and I perceive that voices are calling to me and abusing me with foul names. Such cases of erroneous perception, or ill perception, are termed illusion.

(3) In the previous case, although the wrong cluster of memories was added to the sensation, yet there really was an impression made on the organ of sense to arouse the sensation and elicit the memories. There was no snake on the ground, but there was a cord; there were no voices calling, but there were sound-waves impinging on the ear. But if I saw a snake upon the ground without the excuse of the

cord, if there were nothing at all lying there, or if I heard voices calling when the air was still, and there were no sound-waves impinging on my ear, then the error of perception would be a wider departure from the normal, and then it would be termed, not illusion, but hallucination. It is somewhat doubtful whether, in fact, there is such a thing as a pure hallucination, without any provocation whatever from impressions of sense. There may, it is true, be no agent giving rise to sense impressions from without the body; but the sensation, which I interpret as a snake, may be due to a rouleau of blood corpuscles in my vitreous, and the sensation which I interpret as a voice may arise from the friction of blood in my carotid arteries.

On a higher level than perception, the thinking process is often disordered in ways that are somewhat similar, and the erroneous modes of reasoning are fallacies, which need not be examined here. The errors which are important to the alienist are, in the process of thinking, confusion, and in the thoughts that result from the reasoning process, those incorrigibly erroneous beliefs that are termed delusions.

Confusion of thought is extremely common, both in the sane and in the insane, and is an inseparable accompaniment of delusion; but it is often present also where there is no such definite belief as the term delusion can be applied to. When a person believes that he possesses incalculable wealth, and at the same time begs importunately for sixpence wherewith to buy himself tobacco, the retention of the belief in his wealth, in face of the knowledge of his poverty which his importunity evinces, indicates an extraordinary confusion of thought. It shows an inability

to bring his thoughts together and make comparisons between them; or, supposing that the discrepancy is brought to his notice, and makes, as it assuredly will make, no difference in his belief, it indicates an inability to appreciate difference, a confusion of mind, which, to a normally minded person, is wholly incomprehensible. Confusion of thought is thus inseparable from delusion, but by confusion of thought is usually meant something different from this disability to correct a deluded belief. There are states of mind in which there appears to be a flow of disconnected and incongruous ideas, and in which the flow of language, at any rate, is disconnected and incongruous, or, as it is usually called, incoherent; and this is the usual condition in acute insanity. In such cases the patient is not himself aware of anything unusual or abnormal in his mental condition. There are other cases in which the mind is confused, and in which he feels and knows it is confused, and deplores the confusion. Whether recognised or not by the subject of it, confusion of thought is the rule in insanity; and even in those insane persons who are intellectually acute and even brilliant, there will be found a region of thought in which it is impossible to bring home to them the incorrectness, absurdity, and preposterousness of their thoughts, and this inability will be found to rest upon confusion.

The chief intellectual disorder that occurs in insanity is, however, delusion—by which is meant a belief that is not only erroneous, but incorrigibly erroneous; which is not only incorrect, but which cannot be corrected even when the means of correction are furnished. A woman believes that her child is dead, and when the live child is produced and shown

to her, she still maintains her belief that it is dead. The belief is not only erroneous, is not only without foundation, but even when contradicted by the plain evidence of her senses, it is incorrigible. A man believes that he is a millionaire; the facts that he is an inmate of a workhouse or a pauper asylum, that he is dressed in pauper garb, lives among paupers, is subject to the directions of rough, uneducated nurses, that he never has a penny wherewith to get a shave, or a bit of tobacco, or a drink, that he lives on coarse fare, in most undesirable surroundings, have no influence whatever in dissolving his belief. In spite of the plainest evidence to the contrary, the belief is incorrigible. Such a belief is a delusion.

Delusion is usually accompanied by a feeling of misery or a feeling of happiness, the feeling in either case being out of proportion to, and unjustified by, the circumstances of the individual; and the feeling and the delusion together make up a state of mind which may be called the "delusional state." Occasionally the unjustifiable feeling of happiness or misery exists in the absence of any erroneous belief or delusion properly so-called, and in that case we may apply the term "delusional state" to this unjustified feeling alone, which otherwise would have no general title, though the unjustified feeling of misery without delusion is called simple melancholia, and the unjustified feeling of happiness may be called simple exaltation. Bearing in mind that delusion does not usually exist alone, but is part of a delusional state which includes unjustified exaltation and depression, delusions may be classified as follows:

(1) Delusions with regard to the self, which may refer either to the whole or to part only of the self or personality.

(*a*) Delusions of the whole personality are of several varieties, all rare. In one group the personality is in some way altered, so that the patient speaks of himself as "altered," "strange," "unnatural," but is unable to describe the alteration which he feels. In the second group the altered personality co-exists with the original personality, and the patient believes in a confused way that there are two beings within his body, or that he has another self somewhere outside of himself. In the third group the personality actually is changed, and it is only by straining the meaning of words that the mental condition can be regarded as one of delusion. In this condition a person, after a sleep, or an hysteric attack, or some other crisis, wakes up a different person. He has forgotten his past life, and has perhaps to be re-educated; he has changed his moral character, and the honest or sober man has become a thief or a drunkard, or *vice versâ*; he has changed his disposition and proclivities, so that the steady, industrious workman becomes a tramp and a vagabond. After a period of very various duration, he has another crisis, from which he wakes with his first self restored and the experiences of his second life forgotten.

(*b*) Delusions with regard to part of the self. These are the delusions that some one else, not another self, but a stranger and an intruder, has gained a lodgment in the body, and thinks the patient's thoughts, speaks with his voice, and acts with his body. For the sayings and doings of this interloper the patient regards himself as irresponsible, and, indeed, he often bitterly resents the interference. Or, instead of another personality, he may have within him an animal or an inanimate object—a weasel in his stomach, a worm in his head, a lobster in his bowels, or what not; or his

bowels are obliterated, he has no inside, his brains have been taken out, his legs are of glass, and so on. Persons with delusions of part of the self have often some actual bodily disease of that part which localises the delusion.

(2) The second great class of delusions are those which refer, not to the self alone, but to the relation between the self and its surrounding circumstances. This class falls naturally into two groups—delusions of increased welfare and delusions of diminished welfare; and each of these may be further divided into delusions of the relation of the self to its surroundings and delusions with regard to the relation of the surroundings to the self.

(*a*) In the first group—delusions of increased welfare—the second distinction that has been made is not of clinical importance, since delusions of increased welfare in the relation of surroundings to self commonly accompany delusions of increased welfare in the relation of self to surroundings. They may therefore be considered together. The delusions are on the one hand delusions of exaggerated worthiness and exaggerated competence and power on the part of the deluded person, and on the other are deluded exaggerations of the esteem in which he is held. Individuals so affected believe that they are wealthy, able, learned, skilful, powerful, and generally worthy and competent, in various degrees of exaggeration. They possess more millions than they can express, and invent new words to signify their wealth; they are more brilliant authors, have written more and abler books, scaled more and more difficult mountains, made more runs at cricket, owned faster yachts, begotten more children, married more wives, and so forth, than any other human being

ever dreamed of. They have been created dukes, kings, emperors, gods. They are God. They are to receive, or they have received, favours the most striking from persons in the most various and the most exalted positions. No position is too great for them to attain, no fortune too great to be conferred upon them. The grandiosity of the delusion is very various in degree, and does not always reach the extreme exaggeration that has been described, but the general features of this delusion are common to the class.

(*b*) The second group of delusions of this class consists of those of diminished welfare, and is divisible into two sub-groups that are clinically distinct:

(i) The first of these consists of delusions of diminished welfare in the relations of self to surroundings, and is co-extensive with the delusions of melancholia. They are delusions of unworthiness and incompetence, the self-accusatory delusions, delusions of sin and crime and vice on the one hand, and of impotence and inability and incapacity on the other. Persons affected with delusions of this class abandon themselves to despair as sinners of the unpardonable sin, or give themselves up to the police for crimes that they have not committed, or confess to faults and vices of which they are wholly innocent, or which they greatly exaggerate. They have brought themselves to ruin, they have brought poverty and disgrace upon their families, they have in some unexplainable way involved the whole village, the whole country, the whole human race, in ruin and disaster. There is no solace for them in this world, and no hope in the next. Such is the condition of those in whom melancholic delusions are fully developed; but minor degrees of the same

delusions are very common. It is common to meet with delusions of sin that are not yet unpardonable, of ruin that is not yet complete, of inefficiency that is not yet absolute. The delusions may exist in very various degree, and in very varied combinations; but in all we trace the double element of unworthiness and inefficiency corresponding with the two categories of passion and action.

(ii) Delusions of inimical relations of surroundings to self form a very well characterised group of delusions, distinct both in their character and in their clinical occurrence from the last. They are different in cast and occur in a different class of insane persons. They are the delusions of persecution, of suspicion, of conspiracy. To this class belongs the whole group of systematised delusions—that is to say, delusions under which the deluded person makes for himself a new world, containing some malign principle to whose operation the causation of events is referred—a world from which existences and events that do not directly concern the deluded individual are gradually excluded, until there remains at last only a self with which alone the universe is concerned and a universe dominated by some malign principle directed solely against the swollen and bloated self upon which it is centred. When this stage is reached, everything that exists, everything that happens, exists only to annoy the patient, happens only to injure him. As he goes about the streets the people talk to each other about him, or look at him in a significant way; their attitudes, their gestures, their very dress even, contain some occult quality which is intended to, and does, annoy and injure him. The articles in the newspapers refer to him. Books that pretend to be

books of travel or novels are really implicated in the plot, and refer to him in some cryptic manner. He is referred to in political speeches in the same way as Bacon, according to Mr. Donelly, is referred to in the plays of Shakespeare. Sometimes the centre and origin of all this conspiracy is a single individual; sometimes a group of individuals, also either real or imaginary. It is the Lord Chief Justice, it is the Commander-in-Chief, it is very often the head of the asylum in which the patient is detained, or it is a man or a body of men sent from the asylum in which he was last detained, it is the lodger on the floor above or below, it is the man who lives over the way, it is some relative, or it is some wholly imaginary being whom he knows to exist, but whom he has never seen. But very often it is not an individual, but an influence ; and if an individual or a group of individuals, real or imaginary, his or their powers are exercised through and by means of some occult and mysterious influence. Most often just now it is electricity ; in the first half of the last century it was steam ; often it is chemical vapour, or a system of mirrors or microscopical glasses ; or it is hypnotism or mesmerism, or the Röntgen rays or wireless telegraphy ; or it is something altogether too subtle and mysterious to be expressed in any ordinary language, and a new term has to be invented to characterise it ; and in not a few cases it cannot be expressed in intelligible language at all. The patient then wanders into a meaningless jargon of words, which may hang together in grammatical sentences or may be a mere hash of incoherent words.

The region of thought, including that of belief, is not the only region in which the mind may be

disordered. In cases which are much less frequent than are cases of delusion, but which are not very infrequent, the disorder is not primarily so much in the region of belief as in that of will, and disorders of will are of two kinds, which, although they appear very distinct, often co-exist in the same case.

The first disorder of will is an exaggeration of what is called weakness of character. There is an inability to "make up the mind," to come to a decision, to exercise a choice. The patient will hesitate for a long time before he is able to decide whether to put on the right boot or the left, which foot to begin with in going upstairs, which pen to select out of the tray, what word to use to express his meaning, whether to walk this way or that, whether to take a stick or an umbrella, and so on with all the decisions of life. This is one form, and in strictness should be considered the only form, of what is called *folie du doute*—hesitating insanity.

The second disorder of will is what is known as obsession, in which the will of the patient is, as it were, made captive and overpowered by an impulsion to do some act which he loathes and abhors, but which still obtrudes itself upon him, and at last gets itself done in spite of his exertions to resist it. The mildest form of obsession is familiar to most of us under the title of words or phrases "running in the head." We are most of us familiar with the occurrence of a verse of poetry, a text of Scripture, a passage from some familiar author, a proverb, or some other combination of words, presenting itself to us and being repeated over and over again in silence, until at last it commonly gets itself uttered aloud. Most of us, too, are familiar with an absurd impulsion, when we are walking along the

street, to step upon, or avoid stepping upon, the dividing lines between the flagstones. Sometimes this peculiarity is exaggerated. Usually it is a temporary affair, and affects only such trifling matters as have been instanced, but in some cases it becomes enduring, or even permanent over long periods, and is exhibited in much more important departments of conduct. The words that present themselves persistently, that refuse to be banished, and that gain utterance at last, may be obscene and objurgatory; and their presence in the mind, and still more their actual utterance, may be a source of pain and grief to the person who utters them. The act to which he is impelled by some internal impulsion may be not the occasional and harmless act of stepping on the divisions of the paving-stones, or touching the posts as he passes along the street, but a persistent, unremitting impulse to murder his wife or children, an impulse which, if he is left alone with them, and finds means at hand, may be ungovernable.

Fortunately, the obsession is not often of this lethal character. Very often, when *folie du doute* exists, some degree of obsession is mixed with it; and in this case, not only is the period of hesitation unduly prolonged, but it is filled up, not with the balancing of alternatives as in the normal, but with some entirely extraneous activity which has nothing to do with the choice that is waiting to be made. For instance, the patient who hesitates as to which boot to put on first is occupied, during the period of hesitation, not with balancing the respective desirabilities of putting on the right boot and the left boot, but with counting; and before every act on which he or she eventually decides,

is interposed an interval which is occupied with counting, say to ten, or some multiple of ten.

The next faculty or division or department of mind that may be disordered is that of memory, and memory may be disordered in several ways. Normally, when we remember an event, we remember it with a certain localisation in time—that is to say, we remember it not only as having happened, but as having happened at a certain interval of time between now and then. The localisation may not be precise; we may be unable to say whether it was a month or two months ago, a year or eighteen months, ten years or fifteen; but still we remember it with some localisation in time. We refer it more or less definitely to a time so far distant. Not only do we localise memories in time, but we localise them in space also. That is to say, we remember any particular event as one of a group of experiences that occurred at the same time. When I see this face, which I have seen once before, I not only recognise it as one I have seen before, but, if the memory is complete, I remember about how long ago it was that I first saw it, and I remember also the circumstances under which I saw it. I remember whether I saw it at Mr. Jones's office, or at Mrs. Smith's at-home, or at Robinson's dinner-party.

In any of these respects memory may be defective. I may fail to remember the face at all, to remember that I have seen it before, to recognise it; or, recognising it as a face with which I am familiar, I may fail to remember how long it is since I saw it; or, remembering vaguely that I have been introduced to its owner recently—within the last month or two—I may fail to remember the circumstances under which I became acquainted with him. All these defects of

memory increase as age advances, and are most marked in elderly people. Among the surrounding circumstances connected with experiences of things, the names of the things are prominent, and the first warning of the approach of senility is a growing difficulty in remembering names; and beyond this, a general impairment of nimbleness in dealing with substantives. Defect of memory is, of course, a matter of degree. No one remembers all his experiences, and to forget is as natural and as normal as to remember, nor can any clear line be drawn between a defect that is within the normal and one that is beyond this bound. In practice, however, little difficulty is experienced in deciding that a defect of memory is morbid in degree, since by common consent no defect is considered morbid that is not extreme.

CHAPTER III.

CERTIFIABILITY AND FITNESS TO BE AT LARGE.

A PATIENT may be insane without being certifiably insane—that is to say, although, by prolonged observation of his conduct, we may be convinced that his mind is disordered, and that he is no longer fully responsible for his acts, yet we may be unable to describe in words any specific "fact indicating insanity observed at the time of examination," and so to place him under control. Such persons are extremely difficult to deal with; and though they often eventually become certifiable, they contrive, before this stage is reached, to run through large sums of money, often to ruin themselves, and often to commit criminal acts.

But supposing a patient to be certifiably insane, the first questions that have to be decided are whether he may properly be allowed to remain uncertified, whether he should be placed in private care, or whether he should be sent to an institution. These are questions that depend partly upon the nature and degree of the malady, and partly upon the age, wealth, and other circumstances of the patient.

The character of the malady is the most important consideration. It may be stated categorically that every case of acute insanity should be at once placed

in an institution, to whatever type the acute insanity conforms, and to whatever variety of insanity it may happen to belong. Every patient with acute insanity is a potential suicide, and suicidal patients can only be prevented from effecting their purpose by asylum treatment. It is only in an institution specially constructed for the purpose that the habit of incessant supervision is maintained, and that the appliances for heating and lighting and ventilation, the staircases, water-closets, bedsteads, and other arrangements are specially constructed with a view to minimise the opportunities for suicide. Moreover, patients who are acutely insane need the presence of a medical attendant always within call, for contingencies requiring instant medical treatment are of frequent occurrence; and it is obvious that this condition can be secured in an institution only.

For a somewhat similar reason, general paralytics invariably require to be detained in an institution. They are subject, throughout the whole of the first, and often the second stage also, to sudden outbreaks of violence, to deal with which the continued presence of an adequate staff of attendants is necessary, and this abundance of attendants is only obtainable in an institution.

Lastly, all paranoiacs ought to be detained in institutions. All such patients are potential homicides, and scarcely a month passes without the commission of a murder by a patient of this description, who had given abundant evidence beforehand that he ought to be under efficient control.

Patients of these three classes ought always to be treated in institutions, but they are not the only patients for whom institution treatment is necessary.

All patients who need much control ought to be in institntions, for only in them can much control be exercised. Patients who are very noisy, or who are very restless, or who are sexually excited, cannot be properly managed in private care.

On the other hand, there are patients who ought not to be sent to institutions if this course can be avoided. Young girls or young lads should be kept out of institutions as long as possible, for the fact of their having been placed under care may tell very seriously against them in future life; quiet dements can very well be treated at home or in private care; and persons whose insanity is recent, is of a mild and subacute form, ought usually to have a trial in appropriate surroundings outside an asylum, before recourse is had to this extreme measure.

The means of the patient form a very important factor in determining whether he shall be sent to an asylum or no. In the case of a poor person, no other alternative is possible, since, apart from the expense of supervision, the mere abstention from work reduces them to a condition of dependence; while wealthy men, who can afford plenty of attendants and an isolated house with large grounds, can very well be treated in their own homes. There are multitudes of patients in pauper asylums who, if they possessed adequate means, might be at large; and there are multitudes of persons at large who, if they were not fortunately in possession of means, would have to seek the shelter of an asylum. It is a very common occurrence for a person to have sufficient intelligence to administer his means capably if he happens to possess any, and yet to have insufficient intelligence to earn his livelihood. If he has means, he may very well live

at large, but if he has none, he must be cared for in an institution.

If it is determined that treatment in an institution is unavoidable, or is desirable, the question will often arise whether he should be placed there under a reception order, or whether he should go of his own free will as a voluntary boarder. There are but few cases in which the latter alternative is really the best, though it is often practicable, and sometimes the only practicable course. In such cases the patient must not only be willing to place himself under care, but he must be competent to form a judgment as to the expediency of doing so, and he must be to such an extent of sound mind that, even if it were desirable, it is not possible to make a certificate of lunacy with regard to him. He must be uncertifiable.

Neurologists, who are frequently consulted about cases of insanity, though it is a subject of which they have no special knowledge, almost invariably advise that the patient should travel, and are particularly fond of recommending a sea voyage. Travelling is, however, almost always detrimental in the early stages of insanity; and a sea voyage is probably the very worst course that could be adopted. As will be seen further on, all cases of acute insanity are potential suicides, and on board ship the opportunity and temptation to suicide are constantly present and constantly obtruded, and effective supervision is almost impossible.

CHAPTER IV.

THE CAUSES OF INSANITY.

WHENEVER a mechanism fails to perform the duty demanded of it, the reason must be either that the work is too heavy for the mechanism or that the mechanism is not strong enough for the work; and the two things are not exactly the same. When a human organism breaks down under the stress of life, in a way that the majority of men do not break down, it is because either the individual is weaker than his fellows, or the stress brought to bear on him is greater. For every individual, as for every beam and every rope, there is a breaking strain. Load a beam or a rope with sufficient weight, and, whatever its strength, it will break at last. Subject a man to sufficient stress, and however well he may be constituted, he will become insane. In estimating the factors that go to produce insanity in any case, we have to consider, first, the individual, and, second, the stresses to which he is subject.

The fact that the majority of people are sane, indicates that they possess a nervous organisation of sufficient stability and strength to withstand the stresses to which it is subject; and if here and there one becomes insane, it is because either his nervous organisation was not strong enough to withstand

ordinary stresses, or he has been subjected to stresses of extraordinary severity. The great majority of cases of ordinary insanity belong to the former class ; cases of insanity of drunkenness, and of general paralysis, belong to the latter.

We have no means of gauging the efficiency of a person to withstand stresses, except by observation of his behaviour under their incidence ; but, since every individual is the outcome and product of his ancestry, we may make a rough guess at his efficiency by investigating his heredity. That heredity has a very important rôle in the production of insanity is proved, not less by clinical experience than by the considerations just dealt with ; but what it is that is inherited in cases in which insanity " runs in the family " it is difficult to say. Insanity is manifested in conduct, and it is evidently absurd to speak of what a man is now doing as an inheritance from his forefathers. The only thing that can be clearly conceived as transmitted by inheritance is structure ; and if a son " inherits insanity " from his father, what is transmitted from father to son must be some structural peculiarity of nerve tissue. There are several such peculiarities that may conceivably be derived by inheritance. In the first place, the process of development may be deficient in impetus ; it may come to a premature close ; and in that case the part of the body which will remain undeveloped will be the part which is the last to be completed—that is to say, the highest regions of the brain. The degree of development which is reached by these regions varies much in different individuals, according to the strength and persistence of the developmental impetus. When these are exceptionally great, the highest nerve regions become exceptionally well developed, and the individual

attains to a high level of intellectual development. When the process of development is feeble, and comes to a premature close, the brain never attains full development, and the individual never reaches the normal intellectual standard.

But there are other forms of insanity than idiocy and imbecility, and many of the insane whose insanity "runs in the family" are of average, and even of more than average, ability. How can we suppose that, in such cases, the insanity is "transmitted"? Or rather, what is it that is transmitted by inheritance in such cases? The analogous case of tubercle may help us to understand. That inheritance has a large share in the production of phthisis is as indisputable at the present day, when the tuberculous process is known to be due to the invasion of a micro-organism, as it was before bacilli were discovered; but, though it is known that phthisis is influenced by heredity, it is known also that the bacillus is not inherited. What is inherited is a "delicacy of constitution," a "vulnerability," a "feebleness of resistance," such that, when the organism is invaded by bacilli it has less power to attack and destroy them, they more easily effect a lodgment, establish themselves and multiply, than they do in the tissues of a person of stronger constitution. And some cases, at any rate, of insanity are closely analogous. Among the stresses that do unquestionably produce insanity is that of poison circulating in the blood, and supplied in the pabulum presented to the nerve tissue. There is indisputable evidence with respect to some of these poisons that the nerve tissue of different people has different power of exclusion or of counteraction. No observation is more trite than the amount of alcohol, for instance,

which will make one man beastly drunk, will leave another but slightly elevated, and have no appreciable effect upon a third. And these differences in the power of the nerve tissue to exclude or to neutralise the alcohol that is supplied to it are derived from inheritance. They are part of the innate constitution which the individual derives from his ancestry. There is therefore nothing inconsistent with experience in supposing that similar innate and inherited differences exist in the power of the nerve tissue to exclude or neutralise other poisons; and if, as is probable, many forms of insanity are due to the action of poisons upon the nerve tissue, the influence of inherited quality of nerve tissue is easy to understand in such cases.

But although poisons are among the most powerful stresses that the higher nerve regions have to withstand, and among the most frequent, they are not the only ones. As we shall presently see, there are many other stresses that are provocative of insanity; but the way in which inherited incapacity renders the individual obnoxious to the action of poisons helps us to understand the way in which incapacity, similarly acquired, may facilitate the occurrence of insanity on other provocation than that of poisonous food. We see similar differences in the power of the nervous system to resist disturbing agents, and to maintain equable action, in other respects. We see that the disaster which will reduce one man to despairing impotence will stimulate another to energetic activity. We see that the same insult which will provoke one man to uncontrollable rage will be treated by another with contemptuous indifference. And these differences, again, are innate, and are derived from inheritance; so that we can dimly understand how it is that a set of

circumstances which will produce insanity in one man will have no such effect upon another.

So widely spread and so strong is the belief in the hereditariness of insanity, that proposals are frequently made to limit by law the marriage, not merely of persons who have been insane, but of those who have insanity "in the family"; and the expediency of such marriages is a matter on which medical practitioners are frequently consulted. Such proposals are impracticable. If marriage is to be prohibited in all cases in which a clean bill of health cannot be shown for all the individuals in, say, three generations, the practical result would be to prohibit marriage altogether; and although the offspring of those who have been insane are more likely to be insane, and to have children who become insane, than are the offspring of normal individuals, yet it by no means necessarily follows that such ill results will accrue. The children of any individual who errs from the general standard of the race in any respect exhibit, in the great majority of cases, a return towards the standard. The children of giants are not so tall, nor are the children of dwarfs so short, as their respective parents; and very many of the children of the insane are as sound in mind as they are vigorous in body. Even when insanity is strongly prepotent in a race, and when four or five brothers or sisters are insane, there is usually at least one brother or sister who never shows a sign of insanity. The influence of inheritance in producing insanity is great, but it should not be exaggerated; and it would be a gross exaggeration to suppose that the children of an insane person must necessarily be insane.

There is a widespread opinion that the children

of cousins german are more prone to insanity, and especially to weakness of mind, than other people. The very thorough investigations of Mr. Huth into the marriage of near kin have not sufficed to dispel this opinion, in the face of the occasional occurrence of idiocy or insanity in the offspring of persons so related. That such cases do occur is indisputable, but that in very many cases the offspring of cousins german are as normal and as well endowed as other people, shows beyond question that it is not the mere existence of blood relationship between the parents that produces this effect. The truth seems to be that if there is any heritable disposition in the common family, whether this disposition be to phthisis, gout, cancer, insanity, or what not, the inheritance in the child is intensified by its derivation from both parents. The same intensification would be produced even were the common grandparents destitute of any such heritable disposition, if such disposition existed in both of the unrelated parents of the cousins. Whether the individual gets his morbid inheritance from the common ancestor of his parents or from unrelated ancestors makes little difference. The important consideration is whether he gets the same kind of inheritance—inheritance of the same disposition or defect—from both his parents. In such a case the gravity of the inheritance is more than doubled.

The stresses that produce insanity are of three kinds. The first consists of those in which a disturbing agent acts directly upon the nerve tissue of the highest regions of the brain; in which they are bruised by violence, compressed by tumours, damaged by inflammation, or vitiated by the supply of a poison in the blood. These we will call "direct

stresses."* Gross lesions of the brain, in their active stage, are seldom attended by insanity in the clinical sense. Meningitis, cerebral abscess, cerebral tumour, concussion, fracture of the skull, wounds, lacerations of the hemispheres, are attended, not by active insanity, but by various depths of coma; and coma, though scientifically it is a form of insanity, and though it is the form which all insanities assume at last, if they go on to the end, yet, since it is not clinically regarded as insanity, need not be dealt with here. Although, however, in their active stages, gross lesions do not produce clinical insanity, yet, if they damage or destroy convolutions, this damage may be evidenced in insanity when the course is sufficiently cleared up for the defect of sanity to become recognisable. In every large asylum there is a proportion of weak-minded inmates whose defect of mind is owing to gross structural defect of brain, the result of previous active process.

By far the most important of the direct stresses, perhaps the most important of all the stresses which contribute to the production of insanity, is alteration in the composition of the blood by which the highest nerve regions are nourished.

Simple deficiency of nutriment reduces the efficiency of the function of the nerve tissue, which exhibits itself in deficiency of sanity. In starvation the mind is weakened according to the degree of the starvation, the attenuation of mind reaching to actual unconsciousness when the starvation is extreme, and

* It should be mentioned that the term "stress" has of late years been used in a sense different from that in the text, which was first applied in 1890 to the agents that provoke insanity. It is used to mean exercise, fatigue, exhaustion of nervous tissue. The former meaning has been restored in the text.

when the deprivation of nourishment is very rapid and very great. Even when it is neither, but the heredity is bad, the weakness of mind may be accompanied by active insanity. In a large proportion of the cases of acute insanity that we have to treat, a greater or less degree of starvation has been one of the factors in its production; and copious feeding is one of the most important modes of treatment of acute insanity.

The deficiency in the nutritive supply of the brain may be due, not to starvation, but to hæmorrhage, or to any other condition in which the blood is impoverished; and whatever the cause of the impoverishment, the deterioration of sanity is the same, provided the impoverishment is the same in degree, and the resistive power of the nerve elements is the same. Hence we sometimes meet with insanity, usually of a very intractable type, after severe hæmorrhage; and in all exhausting disease there is some deterioration of mind—deterioration which, in persons whose nervous system was originally badly organised, may attain to actual insanity.

More potent even than attenuation of the nutritive supply to the brain is its vitiation. By introducing a poison into the blood, we can produce insanity at will. We can regulate the degree of the insanity by the amount of poison that we administer, and we can maintain the insanity as long as we please by continuing the administration of the poison. Proof of these statements is exhibited by every case of drunkenness, by every case in which chloroform or ether is administered. The insanity of acute alcoholic poisoning is extremely instructive. From it we learn that the rapid administration of a very large dose of

the poison will produce rapid death by coma; that the rapid administration of a smaller dose will produce a furious mania of short duration, passing, in a few hours, through coma into recovery; that a more gradual administration of several smaller doses, extending over some hours, will produce an exalted delirium of a milder type, passing presently into sleep, and so to recovery; that the prolonged administration of quantities barely sufficient to keep up this milder delirium will produce, after days or weeks, an attack of acute insanity of very different form, characterised neither by maniacal fury nor by jovial exaltation, but by suspicion, misery, and prominent hallucinations of vision, a form of insanity which is of longer duration than the others, and lasts for several days; and, lastly, that the administration of still smaller quantities, if prolonged for years, will give rise to yet another form of insanity, a form in which the exaltation of the third phase is often combined with the suspicion of the fourth, and to them are added pronounced defects of intelligence, and especially of memory, and in this form the duration is still further prolonged. It lasts for months and years, and is often irrecoverable.

The different effects of different dosage, and of greater or less prolongation of the administration of the poison, are not all that we learn from the administration of alcohol. We learn also that the manner in which the insanity is manifested depends not only on the dosage and the mode of administration, but upon the nature of the individual to whom the poison is administered. One person becomes hilarious, jovial, and braggart in his cups; another becomes sentimental, maudlin, and confidential; a third becomes suspicious and morose; and a fourth, under the

same administration of the same amount, becomes furiously maniacal, violent, and destructive.

Alcohol is very important, because it is not only one of the most frequent, but the most manageable, of all the poisons which produce insanity. The number of these poisons is very large, and their constitution most diverse. They include such simple substances as carbonic acid, whose intoxicating effect is seen in the delirium of heart disease, and perhaps in that of pneumonia, and substances so complex as the toxins produced by the specific organisms of zymotic disease. They include foreign substances introduced into the body from without, as well as toxins produced within the body by variation of its own metabolism, and, perhaps most deadly of all, toxins produced by the co-operation of foreign agents and bodily processes. Seeing how readily and how frequently insanity is produced by the administration of alcohol, and how very familiar we are with the delirium of fevers, a form of insanity that has for many years been recognised as due to the action of poisons, it is a little surprising that the influence of poisons in producing insanity has only recently had its due importance assigned to it; but it is not at all surprising that as soon as the toxic origin of insanity is fully recognised it should be exaggerated, and that the claim should be made that every case of insanity is of toxic origin. This is certainly not the case; but still, the rôle of blood-poisoning in producing insanity is a very important one. It is probable that it accounts for all, or nearly all, cases of acute insanity; and it is now certain that it has a very large share in the production of general paralysis of the insane. The nature and mode of

origin of the poison are often very obscure. It is no doubt often produced within the body by some fatal variation of its own chemistry, while often it is introduced from without. Disease that is due to poisoning, whether the poison is introduced into the body or produced within it, is usually febrile in character; it is usually accompanied by raised temperature and other signs of fever; but the poisons that produce insanity do not usually produce fever. In the delirium of zymotic disease there is, of course, fever. There is fever in acute delirious mania, which is probably a disease of the same class. In some cases of puerperal insanity there is fever from absorption of the decomposing contents of the uterus; but in the great majority of cases of acute insanity which are undoubtedly due to intoxication, the temperature is not raised. This is a very important clinical observation, for occasionally the invasion of zymotic disease —of smallpox, scarlet fever, typhoid or other fever— is marked by an outbreak of acute delirium which is indistinguishable from the acute insanity due to other toxins, except by the temperature. A raised temperature in acute insanity should, therefore, always arouse suspicion of zymotic disease.

This is the most appropriate place in which to enumerate sleeplessness among the provocations of insanity. As with several other factors in the malady, it is difficult to determine how far it acts as a cause and how far it is a symptom merely. That there are very many persons who habitually sleep very badly— lightly, intermittently, and for an insufficient number of hours—and who yet never come within measurable distance of insanity, is certain. Equally certain is it that acute insanity is often preceded for days or weeks

by a marked and unusual degree of insomnia, and that the induction of sleep often marks the first step toward recovery; but whether the sleeplessness is a cause or a sign of the oncoming insanity is uncertain; nor is it very important, since in either case it is a warning, and in either case it is to be dealt with in the same way.

The indirect stresses that tend to produce insanity are of two kinds—those which arise within the limits of the organism, and those which arise in the commerce between the individual and his circumstances.

In the first class are included all those bodily processes which make large draughts upon the stored energy of the nervous system, whether the demand is made by the process of growth and development, by that of reproduction, by bodily or mental exertion, by the processes of disease, or for recuperation after illness. Any process, in short, that is generally exhausting, may contribute to the production of insanity, and *à fortiori* the concurrence of two or more of these processes is eminently provocative of insanity.

Close observers of the development of children know that their mental development proceeds, on the whole, alternately with their bodily development; that they have periods in which their bodily growth is stationary, while their minds develop apace, alternating with periods in which their bodily growth is rapid and their mental development ceases, or seems even to retrograde. If, during the latter period, an injudicious attempt is made to force the mental development by close application to mental work, the consequence will be a serious "nervous breakdown" of the nature of insanity. The demand upon the energy of the brain

is greater than it can supply; it becomes so depleted that it cannot carry on its current function, and the depletion exhibits itself in the form of insanity that is known as stupor. The same condition may result, though more rarely, from excessive addiction to athleticism when the mental development is very active. If the combined effect of concurrent physical and mental development is exhaustive, still more exhaustive is the additional demand upon the energies of the organism which is made by the evolution of the reproductive function at puberty, and when to this is added the further drain of frequent masturbation, we can understand how it is that insanity, or a minor disorder of the same nature, is so frequent in adolescence, and how it is that that is the period of life when stupor and hysteria are most frequent.

The dominant rôle of the reproductive function in the life of every organism has already been pointed out in the previous chapters. It has now to be noted that not only is reproduction the aim and end to which all life is subservient, but that reproduction and life are mutually antagonistic—that is to say, the full and complete life-worthiness of the individual is incompatible with reproduction; and reproduction diminishes the life-worthiness of the individual so as in some cases to destroy him or her altogether; and in all cases to render the parent, for a time at any rate, less capable of living, less apt and less competent to maintain the struggle for existence. Seeing that the motive of existence is the reproduction of the race, it is to be expected that, when this aim is attained, existence should cease, or at any rate should approximate to its close.

In the first place, the addition of the reproductive

function to the powers of the previously unproductive organism is itself an occasion of disorder. The infertile organism consists of a large number of organs and functions co-ordinated together and acting one with another in due correlation as one harmonious whole. When a new set of organs and functions of dominant importance has to be added to those already in existence, has to be correlated with them, to be assigned their place in the economy, and to be allotted their share in the life, of the organism, it is evident that so far-reaching and delicate a process of equilibration will be very apt to fail in exactitude, especially if the great co-ordinating agent, the brain, is lacking in power. Hence the period of the assumption of the reproductive function is always a period of danger, and very frequently of disorder The liability to disorder is, in the early stage of the assumption, but small, and insanity at puberty is rare; but the reproductive function is not then fully acquired. It is not until after seventeen that the female is fully nubile, not until after twenty that the male is fully virile, and it is not until these ages that the probability of insanity has to be seriously considered. It is then only that the individual becomes, not merely capable physiologically of continuing the species, but awake to the responsibilities of life. It is then only that the real dangerous stress begins to bear upon the highest regions of the brain; and while insanity before these ages is very rare, it then begins to be frequent.

The reproductive act is a great exhauster of energy. It is always and of necessity inimical to life. In many of the lower animals it is *ipso facto* destructive of life. In man, while it is not thus necessarily fatal, it is yet detrimental. It is exhaustive; it renders the

individual less fit and less capable of resisting adverse circumstances; and, if it is repeated with undue frequency, its ill effects become conspicuous. The woman who has children in rapid succession becomes enfeebled, anæmic, hysterical, the prey of neuralgia and of many nervous maladies, an easy victim to tubercle and other bacilli. The man who repeats the sexual act with great frequency becomes similarly etiolated and enfeebled; and both are apt to give evidence of the exhaustion of energy in neurasthenia or in insanity. The connection of masturbation with insanity is very close. A few years ago masturbation was looked upon, it is scarcely too much to say, as the most potent cause and the invariable accompaniment of insanity; but nowadays masturbation as the prime and sole cause of insanity has been abandoned in favour of "toxins," a very comforting word, which enables us to believe that we know far more about the causation of insanity than we did when we ignorantly called them "poisons." In males, and especially in unmarried adolescent males, occasional masturbation is so extremely common that it is scarcely to be considered abnormal. The same is true of older men who have no opportunity for the normal gratification of the sexual passion. And by those who are becoming insane, or are liable to become insane, it is no doubt practised more freely, it may be to great excess. But insanity does not occur in people who are of sound mental constitution. It does not, like smallpox and malaria, attack indifferently the weak and the strong. It occurs chiefly in those whose mental constitution is originally defective, and whose defect is manifested in lack of the power of self-control and of forgoing immediate indulgence; and when it attacks those

who were originally normally constituted, the breaking down of the power of self-control is among its first effects. It would be wonderful, therefore, if masturbation were not practised, and practised freely, by those who are liable to become, or are becoming, insane. And since the sexual act is in all cases a very efficient cause of exhaustion and depletion of energy, it cannot fail to assist the deteriorative process, to hasten the onset of insanity where this is impending, and to retard and impede recovery where insanity is established. But to look upon masturbation as the sole, or even the chief, agent in the production of insanity, is to take a very exaggerated view.

In the female, indulgence in this vice is very much less common than in the male, and the mere fact that it is practised is *primâ facie* evidence that the girl or the woman who indulges in it has not attained to the normal mental standard, but is congenitally abnormal. In the female, however, the sexual act is less exhausting than in the male, and while the significance of masturbation as an indication of an abnormal mental constitution is greater, its importance as a contributory cause of insanity is much less.

While the female is less obnoxious to the deteriorative influence of masturbation than is the male, she is liable to other stresses of reproduction from which he is exempt. Upon her fall the stress of pregnancy, parturition and lactation, each of which may be the occasion of insanity. The "longings," and equally the aversions, of the pregnant woman are aberrations of mind so usual that they scarcely attract attention; but any occasion on which disorder of mind, however trifling, occurs in healthy and well-constituted people

is an occasion on which insanity may occur in those who are less healthy and less well constituted. Indeed, considering how marked are the mental disorders that often accompany pregnancy, the aversion to the husband, the excessive caprice, the restlessness and "nervousness," it is remarkable that insanity is not more frequent in pregnancy, for on the whole it is an infrequent occasion of insanity, only about one per cent. of all the cases of insanity that occur in women being associated with this condition.

The puerperal state is a much more frequent occasion of insanity, about six per cent. of all the cases among women occurring in connection with childbirth—that is to say, within a month or so of parturition—and when we consider all that childbirth implies, we find no cause for surprise that this should be so. In the first place, when the child is born, an immense readjustment of physiological processes has to be made in the maternal organism. The great supply of pabulum that has hitherto been made to the uterus is now no longer needed there, can now no longer be dealt with there, and has in part to be drafted off to the breasts, in part to be dispensed with. The continual stream of effete products from the nutrition of the fœtus is suddenly cut off, all the arrangements for dealing with them are deprived of their material from this source. No doubt the rapid involution of the uterus supplies their place in so far as quantity goes, but the quality is probably very different, and needs further readjustment of excretory processes to enable it to be dealt with. Then the process of labour is itself a very severe drain upon the great reservoir of bodily energy, and thus diminishes its capacity to bring about these adjustments just at the time

when they are needed. In addition to this, the hæmorrhage, frequently excessive, is of itself a cause of serious stress; and when to all these stresses is added the absorption of septic matter from the decomposing conteuts of the uterus, the wonder is, not that puerperal insanity is frequent, but that it is not much more frequent. In a certain proportion of cases of puerperal insanity, about one-fourth, the temperature is raised, and in these cases the suspicion that the insanity is dependent upon sepsis is often confirmed by the result of local measures directed to emptying the uterus of decomposing matter and sweetening its contents. But on the one hand, the adoption of these measures in such cases does not always produce improvement in the insanity, showing that even where the temperature is raised, the origin of the insanity is not wholly septic; and on the other, we know that there are poisons which produce insanity without raising the temperature, so that we cannot be sure that where the insanity is not septic it is not toxic.

Puerperal insanity is most frequent in the first fortnight after labour, and when more than a month has elapsed before the outbreak, it is no longer called puerperal. At this period insanity is infrequent, and it is not until the later months of lactation that the liability again increases. The insanity of lactation is a disease of exhaustion. It occurs in women who have suckled long and freely, who have had iusufficient food, and who have perhaps had to work hard ever since they rose prematurely from their lying-in. It is therefore much more frequent among poor women than among the well-to-do.

The climacteric is another of those periods of

physiological adjustment which make so severe a call upon the powers of the highest co-ordinating organ. The deprivation of function, no more than the addition of function, can be effected without disturbing the general balance among the various functions of the body. This balance has to be readjusted, and the equilibration is sometimes beyond the power of the organism to effect, and the result is disorder of the highest nerve regions on which the strain falls. The climacteric period is always a period of some disorder in women. They are troubled with sleeplessness, irritability of temper, despondency, loss of energy, and lackadaisicaluess; and in exceptional cases these aberrations are exaggerated into actual insauity. A similar affliction may occur in men at about the age of sixty, which is sometimes attributed to a climacteric in them, though it is more usually associated with the total change of habits and loss of interests arising from retirement from business.

The other stresses of this class are those which arise from bodily disease. In these cases the stress no doubt very often belongs to the previous class, and is a poison produced by the morbid process, or perhaps, as in the case of myxœdema, a poison not so much produced as permitted. The poison is not actually produced by the morbid process, but owing to this process, it is no longer neutralised, and so produces its effect. Generally it may be stated that every bodily disease has its effect upon the sanity, even if it is only, by diminishing the full efficiency of the cerebral action, to produce a mild and inconspicuous weakening of the mental power; and in many cases of bodily disease the disorder of the cerebral processes is considerable enough to amount to actual insanity, as

the frequency of delirium shows us. In the majority of cases, such insanities may be attributed either to starvation, or to poisoning of the convolutions; in some cases these two causes co-operate, as in bronchitis, asthma, and heart disease; in some cases we trace the origin of the insanity to exhaustion of the cerebral energy, as in epilepsy; and in others we are unable to offer a probable explanation of the mode in which the insanity is brought about. Among the starvation insanities may be instanced those which occasionally occur in anæmia and chlorosis, and post-febrile insanity, as well as that weakening of mental power which is observable in every illness of long standing—a weakening which often escapes notice, since persons so situated are not often called upon for severe intellectual effort. Among the insanities due to poisoning may be instanced those which occur in Bright's disease, in gout, in lead poisoning, in diabetes, as well as the delirium of fever, and perhaps also the gloom, often deepening into melancholia, of chronic dyspepsia and intestinal torpor.

Bodily disease is often connected causally with insanity in the sense that the bodily malady supplies the localisation, as it were, of the delusions which are part of the insanity. Tinnitus aurium supplies the provocatiou for aural hallucinations; intestinal ulcer co-exists with the delusiou that the bowels are obstructed; chronic dyspepsia may suggest that there is a live weasel or lobster in the stomach; some uterine affection may be at the root of a delusion of pregnancy; some vaginal irritation may so direct the delusion that the patient believes she is frequently raped, aud so forth.

Lastly, as old age comes on, it may be attended,

not by a gradual and equable decline of the faculties, but by a breakdown more or less catastrophic in character, which may take the form of melancholia, of mania, of persistent delusions, of rapid dementia, or of several other varieties of insanity.

Stresses of the third class are those which arise out of the relations between the organism and its surroundings, and may be dealt with in the order proposed for the activities of conduct in the last chapter. The circumstances under which these stresses arise are those which arouse emotion, and the more powerful the emotion aroused, and the greater the suddenness with which it is aroused, the more effectual is the stress in producing insanity. Stresses of this class are, upon the whole, much less potent than those of internal origin, which in their turn are less effectual than those which have been termed direct. The stresses with which we are now dealing do not produce insanity except in those who are already predisposed to become insane by their heredity.

In the relations which directly concern the physical safety of the organism, the only circumstances that are capable of provoking insanity are those of fright, or "nervous shock." The stress is not a fertile cause of insanity, but a certain small proportion, about one per cent. of all the cases that come under treatment, are assigned to this cause.

Stresses arising in the circumstances under which the livelihood is earned are more important. It does not appear that extreme poverty is of itself provocative of insanity, for we do not find that it is very prevalent among those who live in penury, nor among the victims of what is known as the "sweating system." But the

apprehension of poverty, the fear of losing the means of livelihood, and the descent from more prosperous to less prosperous circumstances, are very efficient occasions of insanity among those who are already predisposed by constitution to become insane. In about five and a half per cent., or nearly as large a proportion as can be assigned among women to parturition, insanity is traceable to the stress of difficulty in maintaining the standard of living.

Among the circumstances which have a certain efficiency in occasioning insanity is change in the mode of livelihood. When a man gives up one career, and embarks upon another, when a medical man turns journalist, or a solicitor is called to the Bar, the revolution in the mode of life, added to the anxiety as to the success of the venture, is occasionally a source of insanity; and the complete revolution of habit involved in retirement from business when mind and body are still active, and no provision has been made for their employment in other directions, is also an occasional source of disorder. The form that the insanity takes in such cases is usually that of melancholia with delusions of poverty.

Stresses arising in connection with the family circumstances are a frequent source of disorder amounting to insanity. First in order among these come disappointments in love and other troubles arising in the course of courtship, which account for about one per cent. of the occurring cases of insanity. Now and then the circumstance of becoming engaged to be married will so agitate a nervous girl as to render her actually insane; and if this occurs upon engagement only, *à fortiori* it may occur upon the occasion of marriage. There are

innocent girls who are totally ignorant of what marriage implies; who are coerced into marriage with men for whom they have no affection, whom perhaps they positively dislike; and who learn for the first time on their wedding night what marriage really means. Such cases are rare, no doubt, but they actually occur, and are responsible for a very small number of cases of insanity. As few are the cases in which connubial excess produces insanity in the husband, but such cases also occasionally present themselves.

No case has been recorded, so far as I am aware, of extreme unhappiness in married life being provocative of insanity, although it would seem *à priori* as if few stresses of the order that we are dealing with could be more severe. Cases have occurred, however, in which the discovery of the unfaithfulness of a wife has been followed by her insanity, and other cases in which it has been followed by the insanity of the injured husband.

The parental relationship is full of occasions of anxiety, which are stresses that may contribute to the production of insanity. Anxiety over the illness of children, the strain and exhaustion of nursing them, the grief over their profligacy or crime, worries as to the means of supporting them, are all stresses which help to produce insanity in parents who are not by nature constituted to withstand exhausting emotions.

The stresses that arise out of the social relations are not often sufficiently severe to provoke insanity, but sometimes they have this effect. Man is a gregarious animal, and cannot live a healthy life in solitude. If he is compelled to live alone, there is

much danger to his mental health, and even if he does not live alone, but his social circle is greatly restricted, the integrity of the mind suffers. People who live in a very narrow social environment, especially if their time is insufficiently occupied and their interests are restricted, are extremely apt to exhibit morbid traits of mind and conduct. They attach a monstrous consequence to trifles; they become fretful, irritable, and quarrelsome; and they are extremely apt to take to drink. Drink is the curse of small communities. Prisoners who are kept in solitary confinement have often become insane, and although the causative influence of the solitude has been repeatedly denied, no one who has been deprived of congenial companionship for long stretches of time can doubt that the deprivation has a serious effect upon the mental health. When, as in the case of many criminals, the man who is subjected to the deprivation is originally a feeble being without mental resources, its effect is necessarily more severe; and, in practice, solitary confinement for long periods has been in most civilised countries abandoned.

Not only is companionship of his fellows necessary to the mental health of man, but it is of prime necessity that he should secure their good opinion; and the loss of esteem, the knowledge that he is reprobated and held in contempt and aversion, is a stress of so severe a character that we might expect to find it a frequent occasion of the onset of insanity. In practice, however, we do not find it so. The Jabez Balfours and Benjamin Lakes do not appear to be more prone to insanity than are other criminals; and the reason may be that they are secluded from all actual experience of the expression of this reprobation,

and find themselves but units among a crowd of others who are similarly treated.

The religious circumstances in which a person lives have not, at any rate nowadays, much influence upou his sanity. The tumultuous emotional experiences of a "revival," as it is termed, do, not infrequently, upset the mental equilibrium of the feebler folk; and we hear of them falling in trances and being subject to convulsions under the influence of the minatory preaching of some eloquent enthusiast, and cases undoubtedly occur in which such experiences are provocative of insanity in persons previously disposed to become insane; but, in this country at least, the number of such cases is insignificantly small.

PART II.

FORMS AND VARIETIES OF INSANITY.

CHAPTER V.

FORMS AND VARIETIES OF INSANITY.

By a Form of insanity is here meant a certain aggregate of symptoms that a case of insanity presents at one time; by a Variety is meant a specific course that a case may run from beginning to end, usually combined with an assignable cause. The distinction is very important. The same variety may, and usually does, exhibit different forms at different times, and often the same individual will exhibit at the same time the characters of more than one form. Every case of insanity is an example of the form of weakmindedness, in the sense that in every case some of the power of mind and some of the capabilities of conduct are wanting; and in many cases the forms of depression and excitement are combined with this weakmindedness. A case which begins with excitement, depression, and weakmindedness may lose, later on, the two former characters, and take on the form of systematised delusion; and after remaining for years in this condition, may lose the latter form, and remain a case of simple weakmindedness. The same form of insanity may be exhibited by different varieties; thus depression appears in acute insanity, in general paralysis, in circular insanity, climacteric insanity, and other varieties. A form of insanity

corresponds with what is called, in ordinary medical phraseology, a symptom; a variety corresponds with what is called a disease, which may exhibit different symptoms at different times or at the same time.

The Forms of insanity are as follows:—

A. Weakmindedness.
B. Stupor.
C. Depression.
D. Excitement.
E. Exaltation.
F. Suspicion.
G. Systematised delusion.
H. Obsession and impulsiveness.
K. Moral perversion.

The Varieties of insanity are:—

1. Idiocy and imbecility.
2. Dementia.
3. Stupor.
4. Acute delirious mania.
5. Acute insanity.
6. Fixed delusion.
7. Paranoia.
8. Folie circulaire.
9. Insanity of reproduction.
10. Insanity of times of life.
11. Insanity of alcohol.
12. General paralysis.
13. Insanity of epilepsy.
14. Insanity of bodily disease.

CHAPTER VI.

FORMS OF INSANITY.

A. Weakmindedness.

Weakness of mind, defect of intelligence, inefficiency, and degradation of conduct in some degree, is common to all forms, varieties, and cases of insanity. In most cases there is some other elemeut which is more conspicuous than the mere defect, and in accordance with this more conspicuous element the form is named. Mania is defect of intelligence, accompanied by so much excitement that the attention of the observer is absorbed by the excitement, and the defect is overlooked or disregarded. Melancholia is defect accompanied by so much depression that the defect is masked and ignored. But it is very important to remember that defect is iu every case of insanity the underlying disorder, upou which the others are superimposed aud round which they are clustered.

Weakmindedness is most various in degree. It ranges from the slight obscuration of mind and diminution of conduct that accompauies severe bodily illness—nay, from the trifling defect that is experienced at the end of a tiring day—down to a dementia so deep that language is no longer understood, that speech is lost, that conduct, save for a few automatic movements, is altogether abolished, that

intelligence and feeliug seem to be reduced to a mere twilight glimmer of consciousness. Beneath this stage, again, is the complete dementia of coma, which is the last stage of every form of insanity that goes on to the end. In different individuals weakness of miud ranges from the man who is just below the highest grade of genius down to the most degraded idiot.

By weakness of mind is often understood defect of intelligence, sometimes weakuess of will; but the term is used here to include a comprehensive defect, involving all the powers of mind as well as of conduct. The patient is not only deficient in intelligence in the sense that he cannot reason acutely, and cannot estimate eveuts and existences at their proper value, but he is deficient in the other powers of mind also. His memory is defective, and usually when weakness of the mind is acquired, the defect is of a peculiar character. It concerns chiefly matters of recent occurrence, and leaves the ingrained iuemories of long-past events but little affected. The will also suffers. Weakminded people are often subject to fits of obstinacy, and in one form of insanity, which will presently be described, intense obstinacy is the most striking feature of the case; but still, even in these there is no continuity of determination. While they resist to the uttermost everything that is attempted to be done for them, they are incapable of adhering consistently to a determinate end, and of modifying the means by which this end can be attained. There are, it is true, forms of insanity—the suicidal, for instance—in which the will seems to be strengthened rather than weakened, but in most forms the will suffers with the other faculties. Nothing is more

remarkable in the demeanour of a general paralytic, for instance, than the way in which he will submit in his own house, and at his own table, to the dictation of a stranger. Occasionally this "facility," as it is called in Scotch law, is the chief defect in weakness of mind. Together with the other mental faculties, the emotions become weakened. The patient is often much more readily moved, it is true, to a display of emotion, and the display is often exaggerated, but the emotion is shallow and transient. Great disasters, loss of fortune, death of friends, leave them but little affected. They are easily moved to anger, but their anger is short-lived. They are easily moved to tears, but they are incapable of lasting grief.

With the decay of mind goes decay of conduct. Of the higher forms of conduct they are incapable. As has been pointed out elsewhere, insane persons are always deficient in the highest developments of conduct, in politeness, courtesy, and all that is implied in the term "manners." They are objectionable at their meals, and selfish and inconsiderate in all things. Then, too, whatever the nature of their occupation, they can no longer conduct it with full capability. Their family relations become impaired; in some department of conduct, if not in all, they exhibit defect; and the deeper and more confirmed the malady, the more departments of conduct are found defective, and the greater the defect in each. In the deepest grades of weakmindedness, mind and conduct scarcely exist, and the individual leads a vegetative existence, in which every function of conduct has to be performed for him.

B. Stupor.

Stupor is a peculiar and well-marked form of insanity which is not very uncommon, but as it is exhibited almost exclusively by the variety of insanity of the same name, its description is left, in order to avoid repetition, until that variety of insanity is reached. Stuporose symptoms, in the shape of cataleptic plasticity and the peculiar vacancy of mind and countenance, are not very infrequent in the melancholic type of acute insanity, to which stupor is allied; but with this exception the form and the variety of insanity are in this case identical.

C. Depression.—Melancholia.

In stupor, the state, as a describable morbid alteration of mind and conduct, remains fairly constant throughout the course of the malady, so that the form of the insanity as an existing state and the variety as running a certain course are identical. The form that we now have to describe is very well characterised and very frequent. It is perhaps the commonest of all forms of occurring insanity, but it is not a disease in the sense that it follows any uniform sequence of events. It is a state which may exist at some stage or other in the course of almost all the varieties of insanity, but it is not itself a variety in the sense in which that term is used here. It may be present in stupor; it may be present in acute insanity, in fixed delusion, in systematised delusion, in folie circulaire, in alcoholic insanity, in general paralysis, and in the insanity of epilepsy, and indeed in any variety of insanity except acute delirious mania; but in none of these cases is it a characteristic or essential, nor is it usually

an enduring feature in the malady. It may present itself at one time or another in any of these diseases, but it is not itself a disease; rather it may be regarded as a symptom which is frequent in insanity than as a variety of insanity, a symptom which may exist in the absence of insanity.

By melancholia we mean a feeling of misery which is not justified by the circumstances of the individual, and, as has been said, this feeling occurs under very various conditions. It may be unattended by any other disorder, and when it so occurs, it is not to be regarded as insanity. "I feel wretched," says the patient. "I feel depressed and miserable, and for the life of me I cannot tell why. I have had no misfortune, my circumstances are good, my business is prosperous, my family relations are happy; but yet I feel so depressed. I suppose it is the liver." And if by "the liver" he means chronic dyspepsia and constipation, he is very often right. If we can relieve the dyspepsia by treatment, we find that, as it improves, the mental depression passes away. Such cases, in which the depression of spirits is the only mental disorder, are called cases of simple melancholia. There are people, usually the subjects of chronic dyspepsia and constipation, who pass a great part of their lives in this condition. They are usually people of spare habit, dark hair, and sallow skin. They have little energy, and less fortitude. The little annoyances of life trouble them more than they trouble other people. They "take things to heart"; they worry over little things; they are always "down on their luck." Fortune, they think, has a special spite against them. Their lives are passed in wailing and complaining, and they radiate discomfort as a fire

radiates heat. If a real calamity overtakes them, they sink under it; and then they are very apt to commit suicide, either before or after they have become acutely insane; and often their chronic melancholy deepens into insanity without the stress of any obvious calamity. They form one class of those from whom the ranks of the insane are recruited.

Melancholia, except in mild degree, does not long remain a simple disorder. As soon as the misery deepens, becomes intense, becomes pronounced, it is attended by definite delusion; and the delusion is always of a character consonant with the insanity. It is always of the nature of diminished worthiness and diminished capacity. In the delusions that accompany melancholia there is always this note of personal unworthiness and personal incapacity, but curiously, as it appears, there is rarely diminution of personal consequence. On the contrary, the self-consequence is often exaggerated, and exaggerated to a monstrous degree, but it is a mistake to suppose that it is always so. The feeling of personal consequence is sometimes diminished. In a few cases one is met by the protest, "Don't trouble about me; I am not worth troubling about. All these things are too good for me. Leave me to the fate which I deserve." But usually, as in delusions that will be mentioned, the personal consequence is exaggerated.

The *delusions* of pure melancholia are chiefly religious delusions, delusions of wrongdoing, and delusions of poverty. There is, in addition, a very large class of delusions of personal repulsiveness, but where these exist the case is not usually pure melancholia, and is often not melancholia at all. Such delusions are usually associated with the idea

of persecution, and the cases in which they exist graduate into paranoia, and for the most part are pure paranoia, in which melancholy is replaced by indignation. Finally, in many cases of melancholia there are delusions of impending evil, often at the hands of others, which, although they are in a sense delusions of persecution, are yet very widely different from the delusions ordinarily so called.

Religious delusion and delusion of wrongdoing are closely allied, and may be taken together. The patient is convinced that he has sinned, sinned deeply and irremediably. Very often he has committed "the unpardonable sin," an expression which different patients interpret very differently. By some is understood a hasty objurgation, by some deliberate blasphemy, and very many of the unpardonable sinners mean that they have been addicted to masturbation. From having sinned to being damned is but a short step, and the majority of these melancholics with religious delusions are, in their own estimation, in this perilous state. Delusions of wrongdoing are very numerous and very various. Sometimes the patient deludedly believes that he has robbed a bank, or committed a murder, or done some other act of real wrongdoing. Others, again, attach the stigma of wrong to some innocent act which they really have done, and are overwhelmed with remorse at having called some one a harsh name, or shut a door in a manner which seems to them felonious, or thought something that they ought not to think. They have brought misfortune upon all their family, all their countrymen even, by some trifling neglect or some small peccadillo. Sometimes they are convinced that they have done wrong, but for the life of them

they cannot think what the wrong act was. Delusions of these classes are usual in the melancholia of early life, especially the religious delusions, while delusions of wrongdoing may exist at any age.

Delusions of poverty are unknown in the young, are rare in women, and are most often met with in men after the age of fifty. They are often very extreme. A man who lives in luxury and possesses an ample income will see the workhouse staring him in the face, and will go and inspect it to see what his future quarters are like. He will refuse food because he cannot afford to pay for it, or commit suicide to save his relatives from the burden of maintaining him.

Delusions of disease, malformation, or repulsiveness are less common in melancholia than those of the varieties enumerated above, and, as has already been stated, are not, as these are, confined to cases of melancholia. At the one end they graduate into hypochondria, at the other into paranoia and fixed delusions. The patient is subject to syphilis; or his bowels are stopped and nothing ever passes through him; he cannot digest his food; he is impotent; he cannot pass water. In such cases the condition is allied to hypochondriasis, and they are often called hypochondriacal melancholia. Or the patient may declare that his brain has been removed, that he has no bowels, that he has a weasel, a rat, a dog, inside him, that he has no back to his head, that his legs are of glass, and so forth. Usually such delusions are not accompanied by a corresponding degree of depression, often they are not accompanied by any depression at all. They then fall into the class of fixed delusions, and are excluded from that of melancholia. Then there are the delusions of

malformation and repulsiveness. The patient believes that the nose is too large, that he has horns, that he has a loathsome skin disease, that he is leprous, and so on, and these patients also are usually but little melancholic, at any rate after the first inception of the delusion. The important aspect of this form of delusion is that it leads to or is associated with the notion that people are talking about it, that they notice it, that they smile at it, that they jeer at the patient in consequence of it. This, again, is not melancholia at all; it is persecutory delusion.

The last class of delusions witnessed in melancholia are those which are persecutory in form, though they are very different from the delusions of persecution which are the prominent features in paranoia, and the difference is that, while in the latter the delusions arouse indignation and an intolerable sense of injury and wrong, in melancholia they produce no such effect. Very often the punishment is regarded as only too well deserved; and, if not so regarded, still it is not resented. It gives rise to efforts to escape, which often take the direction of suicide; to panic and horror; to misery the most profound and apprehension the most terrible; but it never provokes to retaliation. The melancholy patient who thinks that the police are after him, that he is to be put in prison, condemned to penal servitude, hanged or otherwise killed, cut into little bits, boiled in oil, starved to death, and so forth, will seek refuge from his impending fate in voluntary death, will interpret the efforts of those who prevent him as part of the persecution to which he is subjected, and will struggle violently with them in consequence; but he will never retaliate upon them. He will never take the initiative in an

assault upon them. He will wail in his misery, and wonder what he has done to deserve such a dreadful fate ; but he will never complain with bitterness of the injustice, nor harbour revenge against his persecutors. It is in these respects that these delusions, persecutory though they are in character, differ from the " delusions of persecution " of the paranoiac.

The *conduct* of the melancholic is usually consonant with the depression which he feels and the delusions that he entertains. In simple melancholia it is merely diminished. The patient suffers, and complains of suffering, from a diminution of energy. Exertion is painful to him, and great exertion is impossible. He sits and lounges about, he is incapable of conducting his business, he cannot interest himself in reading or other occupations. If he is compelled to get up and go for a walk, he often shows by his profuse sweating and his feeble pulse that his disinclination for exertion is not mere laziness, but is a real inability. If his depression is accompanied by delusion, his conduct is modified accordingly.

The sense of personal unworthiness is sometimes so extreme that the patient not only thinks that he ought not to live, and endeavours to put an end to his life, but that, so long as his existence continues, he refuses to allow himself the ordinary comforts of life, and endeavours by every means to mortify his flesh. He refuses delicate food, and if he consents to eat at all, he demands offal and leavings. He refuses the comfort of a bed, and is he consents to lie down at all, he lies on the bare floor. He will tear up his clothes because he is only fit to wear rags, he will refuse to wash because washing is too good for him.

If the delusion is of sin, he bemoans himself and

prays for forgiveness, or practises some self-imposed penance. If he is an unpardonable sinner, for instance, and identifies this sin with masturbation, he may attempt, and even effect, castration. If his delusion is of crime, he may, and such patients very often do, give themselves up to the police and accuse themselves, or he may refuse to associate with his family, or leave his home and settle in some squalid surroundings under the belief that he is not fit to associate with his family. If his delusions are of poverty, he may, as already stated, refuse food on the ground that he cannot afford it, or he may sell his property at some absurd sacrifice in order to secure a remnant to live upon. The colouring of unworthiness in such cases clings, not only to the patient himself, but to his belongings. He is not only himself a useless, worthless being, who is no good, but his business is valueless, his investments are rotten, his connection is narrow and poor, and his banking account a fraud. If the delusion is hypochondriacal in character, then he goes, as hypochondriacs do, from one physician to another with the story of his ailments, he measures his urine, he examines his fæces, he weighs himself several times a day, and he takes physic without end. Lastly, if his delusion is persecutory in character, he is often driven, by the impulse of panic, to the wildest acts. These are the patients who jump out of windows, who throw themselves in front of railway trains, who leap off bridges, who cut their throats, who blow out their brains, who commit suicide by sudden impulsive violence.

The *bodily condition* in melancholia varies much. In many cases there is nothing discernibly wrong with the bodily health, and these are cases of mild degree or of long duration; usually, however, melancholia

is associated with loss of flesh, with constipation and with dyspepsia. The loss of flesh may be steadily progressive in spite of copious feeding, and the patient may become extremely emaciated and die, apparently of starvation, although he has been fed abundantly throughout the illness. The constipation and disorder of digestion point to intoxication from absorption of decomposing matter from the gastro-intestinal surface; and in some cases the contents of this cavity are incredibly foul-smelling and offensive. In such cases, if the stomach be washed out, the extracted matter is intolerably foul. The complexion is often muddy, and the tongue flabby and coated. The temperature is never raised and is sometimes below normal. The pulse is small and feeble to the touch, but the blood pressure is found by measurement to be increased.

Melancholia shades off into other forms of insanity. We have already seen how in one form it is allied to stupor. In acute insanity it often accompanies maniacal excitement. It often accompanies, and more often is confused with, fixed delusion, a delusion of this class which endures for years, and which is of a character to provoke and justify depression—such a delusion, for instance, as that the brains have been removed or the bowels stopped—being accompanied at first by depression. After these delusions have become fixed and have endured for years, the expression of melancholy may still remain, but we cannot doubt, from the unconcern with which such people go about their work, from the heartiness of their appetites, and from the absence of all reference to the delusion unless attention is called to it, that the expression of melancholy is merely the continuance of a habit, and does not correspond with any actual feeling of melancholy

now present in the mind. The connection of deluded melancholy with, and its distinction from, persecutory delusion, have already been pointed out; and it is now to be added that melancholia is a phase of folie circulaire, and that it is very common in insanity from alcohol and in general paralysis. It is very often the form of insanity exhibited by the insanity of the puerperium, of lactation, and of the climacteric; and it is the usual form of the insanity of starvation and of phthisis.

D. Excitement.

States of excitement scarcely need description; their name characterises them. What we mean when we say that a man is excited is that his movements are excessive—excessive in amount, excessive in rapidity, excessive in emphasis. We mean that he talks more than he should do—more continuously, more loudly, more rapidly, and more emphatically; that he gesticulates in excess; that all his movements exhibit the same excess in comparison with the movements on the same occasion of the unexcited man. In the excitement of insanity there is more than this. The excitement may, as in a sane person, arise upon provocation only, last its time, and burn itself out; and in this case it is excessive while it lasts. But not infrequently it endures: it lasts all day, and encroaches upon the hours usually given to sleep, or perhaps absorbs them entirely. It needs no provocation to start it; or, if it appear to begin upon provocation, and to be from time to time intensified and continued, it is upon provocation that would not be provocation to a sane person.

Excitement may inspire and characterise conduct of the most different grades of elaborateness, and may be of the most various degrees. When it is exhibited in the higher grades of conduct, its subject rises early, full of schemes of business or pleasure. He fusses noisily about the house, indifferent to his disturbance of other people's slumbers. He is very impatient of delay: he cannot wait a minute for anything that he wants, and if it is not forthcoming on the instant, he flies into a rage. The course of the post is not expeditious enough for him. He sends his letters by telegraph, and his letters are extraordinarily numerous. They would be numerous in any case, but their number is doubled, and more than doubled, by the frequent changes of his mind, and by the impulsiveness with which he acts upon every passing whim. He determines to make some purchase, probably a very unnecessary one, but one for which he can adduce twenty plausible reasons, and he writes to tell his solicitor that he will call the next morning. Scarcely is the letter posted when he sees that he will attain his object more quickly by asking his solicitor to lunch. He telegraphs accordingly. Before his messenger returns, it occurs to him that he had better ask the vendor to lunch also. Another telegram is despatched, and since he cannot entertain more than one visitor at his club, another must be sent to the solicitor to announce the change to an hotel. Then he remembers that he has been drawing heavily of late on his banking account, and that he may not have the necessary funds available. Another telegram to the bank. But if there are insufficient funds in the bank, he will have to sell stock to raise the funds: another

telegram to his broker. Then he determines that it will be better to pledge the stock to the bank rather than to sell it. More telegrams to the broker and the bank. The broker won't like the contradictory orders—never mind; ask him to dinner—ask them all to dinner. Put off the lunch and have a dinner instead, and ask the solicitor, the vendor, the banker, and the broker. Yes, and why not Smith and Jones and Robinson as well? More telegrams; and then, since two out of three of the invited guests decline, the whole thing is postponed, also by telegraph. Meantime, in the intervals of telegraphing, his hands have been full. He has been constantly ringing the bell and giving orders—giving them, modifying them, and countermanding them—constantly wanting something fresh, running up and down stairs, writing letters, haranguing this person and that, flying into a rage upon the slightest opposition, tearing the bell down on the slightest delay, and talking almost incessantly. This is a fair description of the conduct of a person who exhibits, on a high level of conduct, a moderate degree of excitement; and conduct of this kind is very usual in the earliest stage of general paralysis, though it is by no means confined to cases of this malady.

Excitement on a very low level of conduct is exhibited by the lunatic who howls all through the night, who strips himself naked and ramps about his room, hammering at the door and walls, clapping his hands, shouting, singing, swearing, raving, laughing, crying; and between the simplicity of such conduct and the elaborateness of that described above there is every degree, and every degree exists also in the amount of excitement exhibited.

"Excitement" and "mania" are not quite convertible terms, but mania is always excitement, though there are degrees of excitement so mild, or levels of excitement so high, that they do not attain to those of mania. By mania is meant a considerable degree of excitement upon a low or middle level. Conduct so elaborate as that of the first case described above would not be called maniacal. It is excitement merely, and it falls short of mania because of its elaborateness; because, although it is ill-adjusted to the circumstances of the individual, yet it is not very widely out of adjustment. But if, instead of arranging a dinner with his solicitor and banker and broker, and Smith and Jones and Robinson, he were to despatch his telegrams of invitation to the King and the German Emperor, and the Czar of Russia and the President of the United States, then activity, being equally excessive upon a lower level—exhibiting a more plentiful lack of appreciation of his own circumstances and of the proper mode of dealing with them—we should consider that it exceeded the bounds of mere excitement and became actual mania. And from this level, over-activity remains mania all the way down to the pure automatism of screaming and raving and hammering at the wall, from which the patient cannot be diverted by any ordinary effort to distract his attention.

The term "mania," like the term "melancholia," with which it is often contrasted, connotes a statical "form" of insanity—that is to say, a state of things exhibited at one time, which may occur in the course of any of the varieties of insanity. But whereas "melancholia" means a state of mind, "mania" means a phase of conduct. It means excitement, or over-

activity, at a low level of conduct. It does not mean a "variety" of insanity, in the sense that it originates in a certain way, runs a typical course, and has a definite conclusion. Like melancholia, it should rather be regarded as a symptom occurring in many varieties of insanity than as a variety in itself.

E. Exaltation.

Exaltation is often combined with excitement, and often exists without a trace of excitement. It is not a phase of conduct, but purely a mental condition, and is the reverse of melancholia. It resembles melancholia in that it may be "simple"—that is to say, unattended by delusion—or it may be accompanied by delusion of certain types.

Simple exaltation is much less common than simple melancholia. It is not at all uncommon to meet with people who feel a misery which they know to be unreasonable and unjustified by their circumstances, but it is rare to meet with a person who has a feeling of elation which he knows to be unreasonable and unjustified. As the note of melancholy feeling is the conviction of personal unworthiness and personal incapacity, so the note of exaltation is the conviction of increased worthiness, increased capacity, and increased consequence. As the conviction of the melancholic is of sin, so that of the exalted patient is of self-righteousuess; as the delusion of the one is that he has done wrong and committed crime, so that of the other is that he has conferred, or intends to confer, untold benefits on his fellows; as the terror of the one is actual or impending poverty, so the

exaltation of the other is in the possession or the promise of wealth; while the one deplores his incompetence, his disease, his repulsiveness, his unworthiness, the other glories in his capacity, both bodily and mental, in his strength, his beauty, his skill, his health, his attractiveness. In all respects the two are exactly antithetical.

A low degree of exaltation is often seen in the early stage of drunkenness. After a convivial dinner, a man becomes hilarious: he feels jolly; his laughter is easily excited, especially by his own rather feeble jokes; he feels unusually "fit"; he will venture to make a speech for the first time in his life; he will undertake a walking tour, a bicycle race, that he would, when sober, know to be far beyond his powers; he will challenge the champion billiard or golf player to a match, and bet upon his own success. Now is the time to get a subscription out of him. He is generous, benevolent, expansive; and you can, without much difficulty, elicit his opinion that he is a very Lovelace among the fair, he is such a captivating fellow!

More exaggerated cases of exaltation proceed along all these lines together, or along only one or a few of them. In general paralysis, a man is at once wealthy beyond the dreams of avarice; his generosity and charity are on a par with his immeasurable wealth; his personal capacity and attractiveness are such as no mythology ever attributed in strength to Hercules or Samson, in wisdom and knowledge to Solomon or Aristotle, in beauty to Apollo or Adonis; but in many cases the exaggeration is in one direction only. The patient lays claim to righteousness, or even to Deity, but not to wealth

or strength. Or he is absorbed in contemplation of his millions, but lays no claim to personal superiority; and so on. It is, however, in one or more of the five respects that have been mentioned that his exaltation is displayed.

While the melancholic is the greatest of sinners, the exalted patient whose delusions have a religious cast seldom contents himself with a position among the elect and a certitude of salvation. He aims at higher things. He is either the Son of God or he is the Deity Himself. Or his exaggerated sense of his own worthiness is shown in mundane titles. He is lord, duke, prince, king, emperor, and has, besides, a score of fantastic titles never heard before.

Antithetical to the delusions of crime of the melancholic are the delusions of benefaction of the exalted. He abolishes poverty by the simple expedient of giving everybody a thousand a year. For the small service of handing him a cup of tea, or even for the asking, or because he likes the look of you, he will present you with a cheque for £10,000, written, it may be, on a dirty bit of newspaper. He will give away to strangers his most cherished possessions—the heirloom picture of his grandfather the mayor, the cups that he won in athletic sports at college, his favourite pipe, even his dog. He is full of benevolent schemes for improving the condition of the poor; he will put an end to war by casing ships in indiarubber; and so forth.

As common as the assumption of superlative titles is the assumption of superlative wealth. Of all exalted or grandiose delusions none are more frequent than those of great possessions: millions and thousands of millions in money, land in provinces and whole

countries, streets and towns of houses, jewels in bucketsful—nay, one patient proposed to pave all the streets of London seventeen feet thick with diamonds—fleets of ships, palaces, immeasurable wealth of every kind. Allied to these are the grandiose delusions of family—scores of wives and hundreds of children.

Either along with such delusions as the foregoing, or held independently of them are delusions of increased capacity. The patient is the greatest poet, the greatest traveller, the greatest statesman, the greatest inventor, mechanician, architect, painter, engineer, cricket player, orator, or what not, that the world has ever seen. He can beget a hundred children in a night; he can knock down a house at a blow; no task is too great, no endurance too extreme, for his powers; and his magnificence extends to all his possessions. His house is the most exquisite, his wife the most beautiful, his children the cleverest, his business the most profitable, his garden the most fruitful; everything belonging to him is superlative of its kind.

Antithetical to the persecutory delusions of the melancholic are the delusions of the megalomaniac that he is to be knighted, enobled, that he is to be called to the throne, that new titles are invented for him, that all the men worship his intellect, and all the women are in love with his beauty.

The *conduct* of the megalomaniac, like that of the melancholic, is sometimes consonant with the exaltation that he expresses and with the delusion that he entertains; often, however—more often, perhaps, than with delusions of depression—the conduct is out of all relation with the delusion, and is scarcely

coloured by it at all. There are cases in which the jovial or dignified or pompous aspect and demeanour of the patient shows that his delusion is a veritable motive to conduct; and this indication is corroborated by his more definite acts. If his delusion is of wealth and of benevolence, he gives away thousands with unsparing hand. Every scrap of paper that he can pick up becomes a cheque for a fabulous amount, and is given freely to the first passer-by. If his delusion is of increased capacity in any department of skill, he will attempt to exhibit it. He will insist upon showing the professional cricketer or billiard player how to play the game, the professional artist how to paint, the professional musician, to perform. He will write reams of doggerel which he calls poetry, and which he will read to whomsoever he can get to listen. Does he think he can jump over a house or knock it down with a blow? he will stand before it and make the endeavour, nor will he be in the least disconcerted at his failure.

In many cases, however—and, as in delusions of depression, these are cases of fixed delusion—the deluded belief has astonishingly little influence upon conduct. In every large pauper asylum there are queens of England who see no incongruity in spending their lives at the washtub; kings, emperors, and gods who pass their time in laying tables, scrubbing floors, and carrying coals; whose delusions have practically no influence upon their lives, and would not be suspected were they not elicited by questions; who subserviently obey the attendants, and address them as "miss" and "sir." The very man who has just boasted to you of his countless millions and offered you a substantial share of them, will beg obsequiously

for sixpence to buy a bit of tobacco, and recognise no incongruity in so doing.

The *bodily condition* in cases of grandiose delusion is usually good. In fixed delusions of this character the patient is usually hale and hearty, lives to a good age, and maintains his health. When grandiose delusions occur in the course of general paralysis, the muscular condition is usually excellent, even though the paralysis progresses rapidly. The hair and nails grow fast, the digestion is good, the appetite often ravenous, and the bowels regular.

Exaltation is exhibited in most varieties of insanity: in acute insanity; in fixed delusion; it forms one phase of folie circulaire; in general paralysis of the classical type its most extreme instances are found; it is sometimes seen in alcoholic insanity; is rarely combined with epilepsy. In systematised delusion there is always an undercurrent of grandiosity, in the exaggerated importance which the patient attributes to himself, and the exaggerated position which he gives himself in the scheme of the universe, but the delusions of increased worthiness and increased competence to which the term "exaltation" is here limited are never seen in systematised delusion.

F. Suspicion.

This is a fairly well characterised form of insanity, and not an infrequent one. It is characterised by its title. The subjects of it are the prey of unreasonable and unfounded suspicion. As with other forms of insanity, a certain degree of it is often seen in sane persons; but it occurs in the sane, not as a temporary alteration of character—as depression,

exaltation, and excitement are apt to occur upon occasion—but as a permanent type of character pertaining to the individual through all his moods; and consonantly with this we find that when it occurs in insane exaggeration, it is extremely intractable and irrecoverable. There are plenty of sane persons who, whenever they lose a thing, suspect that it has been stolen; whenever anything is broken, suspect that it has been done purposely; when a friend passes without observing them, suspect that they have been intentionally "cut"; who place the worst interpretation upon the acts of all around them, and are on the alert to detect slights that were never intended, and discover insults in the most innocent speeches. In insanity of suspicion the same thing happens, and happens to an exaggerated degree. The subjects of it suspect every act of everybody, and suspect even inanimate things. If you ask them how they do, they see some sinister motive in the question, and it enrages them. Every proposal that you make to them is rejected, from suspicion of its object. The man suspects that his wife is unfaithful, the woman that her husband goes astray. The business man suspects that his partners are trying to swindle him. Commonest of all is the suspicion that the food is poisoned.

The *conduct* of persons with this form of insanity is such as might be expected from its character. They withdraw from companionship, they shrink from contact with their fellows, they become solitary, silent and sullen, irritable and depressed. Smarting under their fancied injuries, they sometimes become violent; and as suspicion of poisoning is the most frequent mental peculiarity, so refusal of food is the most constant feature in conduct.

The *bodily condition* in iusanity of suspicion most often exhibits signs of phthisis, since it is in the insanity of phthisis that suspicion is most frequently and most prominently exhibited.

Suspicion is evidently closely allied to the following form of insanity—systematised delusion—as well as to depression, with which it is often associated. It differs from the former in the absence of systematisation. The patient is suspicious, indeed, of every one and everything, but while he suspects that everything or anything may be designed to injure him, he does not refer this design to any individual, or body of iudividuals, or occult influence. He looks upon the individual instances of persecution as isolated occurrences, each of which is indeed designed to injure him, but which are not all bound together as part of a comprehensive plot by which the whole uuiverse is combined to persecute him. It often presents the further difference that the suspicious lunatic is suspicious only, and is not completely couvinced of the adverse intention, while the subject of systematised delusion is absolutely certain beyond the shadow of doubt.

G. Systematised Delusion.

This form of insanity is seen in one variety only of the malady—viz., in paranoia. Its description will therefore be deferred until that variety is dealt with.

H. Obsession and Impulsiveness.

There is a natural affinity between obsession and impulsiveness which renders it appropriate to describe

them together. Impulsiveness is sufficiently characterised by its title. It is a sudden, unexpected outbreak of riotous activity. It is never manifested except by those who are already suffering from some other form of insanity, or who are epileptic. It is most frequently associated with epilepsy, with acute insanity, and with stupor; but sometimes is seen in dementia, especially in the young, and in melancholia. The patient, who may have been for hours, days, or even weeks, in a state of calm, or even of stupor, with great defect of activity, suddenly and without warning breaks out into extreme violence, which is usually of frantic and unintelligent character. He rushes to the window and jumps through it, but so undirected and unintelligent is his action, that not only is he indifferent as to whether it is open or shut, but he will thrust arms and legs through different panes of glass, thus effectually barring his purpose, if he had a purpose, of getting to the other side. Or he suddenly seizes the tablecloth, and with one frantic jerk sweeps all the breakfast things on to the floor; or he seizes a weapon and attacks indiscriminately everybody within his reach; or he directs his violence against inanimate objects, smashing windows, mirrors, ornaments, and everything breakable to which he has access; or he seizes a knife and cuts his own throat or arm, or stabs a bystander. Whatever the precise nature of the act, it is characterised by its suddenness, by its apparent want of motive or provocation, and by its want of intelligent direction.

Obsession is allied to impulsiveness in its motor character. It is a prompting to action, and the action to which it prompts is often, even usually, sudden in its occurrence; but it differs from impulsive action

in being preceded by a period of hesitation and struggle, prolonged, it may be for hours, it may be for months or years. The commonest and most innoxious form of obsession is the prompting to vocal utterance that we have when an air of music, a line of poetry, a proverb, or some other verbal or vocal sound presents itself again and again, becomes more and more prominent in the mind, until at last it gets itself uttered aloud. Another variety, less frequent, but not infrequent, is the absurd anxiety that we sometimes have, when walking on a flagged pavement, to avoid treading, or to insist upon treading on the intersections of the stones. Another not infrequent variety is the touching of posts, and other regularly occurring objects. Closely allied to touching of recurring things is the counting of them, and many people count things as they pass in carriages or trains —windows, houses, telegraph poles, bridges, bicyclists, or what not—until they are weary and annoyed with themselves for their waste of time and energy. In all such normal or quasi-normal cases, the practice is easily relinquished, and the action which is prompted is itself innocent. The morbid varieties of obsession are distinguished by excess in both directions. The action which is prompted may indeed be innocent, and often, in fact, is the counting that we have already described; but often it is a criminal or vicious act; and, in any case, the prompting is persistent and prolonged and repeated, and cannot be dismissed at will, but maintains its force and vividness, in spite of every struggle to subdue it. Thus, a person is compelled to count, say to ten, before anything that she wishes to do can be done. When she rises in the morning, she must count ten before she can wash

herself; ten before each article of clothing can be put on; ten before she can open the door; ten, perhaps, on each stair, before she can descend to the next; and so throughout the day. Or it may still be an articulatory utterance, but of an objectionable character. The words that present themselves and demand utterance may be obscene or blasphemous, and may present themselves with such vividness and persistence and constancy of repetition that at last they become uttered aloud, to the pain and grief and horror of the utterer. Again, in some cases the act prompted may be suicidal or homicidal, and may recur with increasing persistence and force until at length the sufferer seeks police protection against himself, or implores the shelter of a lunatic asylum to preserve himself from crime, which he abhors, but which he feels that he cannot but commit.

In all these cases there is a strenuous and prolonged struggle within the patient's mind, between the impulsion to the deed and the determination to resist and abjure it, so that his life is one long internal strife and hesitation. In yet another class of cases, a similar balance of motives exists, a similar prolongation of hesitation takes place, over all the simple and harmless acts of daily life. The period of delay and hesitation is not, as in the case previously mentioned, filled up by counting, but is a simple conflict of motives as to whether, for instance, the right boot or the left should be put on first, or whether there may not be sin in eating a piece of bread and butter, and so forth. This variety of obsession is called *folie du doute*, or doubting mania.

K. Moral Perversion.

The fabric of morality rests upon a single foundation, viz., the ability to forgo a pleasure or incur a pain, now, upon the instant, in order that by our present self-denial we may secure benefit hereafter. Lack of this ability is evinced in vice, by which is meant immediate indulgence at the cost of disproportionate detriment hereafter. When vice is pushed to excess, it becomes insanity; and there are certain forms of insanity that are characterised, if not entirely, yet mainly and most conspicuously, by the excess of vice as here defined. Every form of self-indulgence, when it entails no subsequent detriment, either to the actor or to others, is right and proper and moral. Only when it involves subsequent detriment to the actor is it vicious, and the degree of vice is marked, not only by the magnitude of the difference between the present pleasure and the future pain, but also by the certainty with which the pain is incurred, and by its imminence at the time the pleasure is indulged in; and when, in any of these respects, the degree of vice becomes extreme, it amounts to insanity. The thief who knows that his theft will never be discovered is not vicious in the sense in which "vice" is used here. If his booty is of great value and he knows that his punishment will be light and will not involve its restitution, he is still not vicious, for the benefit that he gets outweighs the pain that he incurs. If he incurs a heavy penalty, but there is little chance of his conviction, and of the penalty being inflicted, still he is not vicious; and if the penalty is both heavy and certain, but will be long delayed, then whatever the turpitude of his act, it

is but little vicious in this sense of the word "vice." But if the opposite state of things obtains, then the vice becomes extreme, and extreme vice is insanity. The man who steals under the very eye of the owner of the property, with the policeman standing by; the boy who takes the tarts while the pastrycook stands over him with uplifted cane; the clerk who embezzles money the day before the audit, well knowing that his defalcation must be discovered on the morrow; the candidate for a place who goes drunk to his would-be employer; exhibit a degree of vice so great as to border upon insanity, and beyond such a degree as this the insanity becomes unquestionable. There are persons who indulge in vices with such persistence, at the cost of punishment so heavy, so certain, and so prompt, who incur this punishment for the sake of pleasure so trifling and so transient, that they are by common consent considered insane, although they exhibit no other indication of insanity.

The following cases are illustrative of moral insanity: An Afghan who had been deprived first of his right hand and then of his left, struck off in punishment for theft, seized with his stumps, and made off with, an earthenware pot of very trifling value, and did this under the very eyes of the police, well knowing that he would probably be hanged next morning, as in fact he was. A lad at college, the son of well-to-do parents, who kept him well supplied with clothes, and made him an ample allowance, stole a suit of clothes and a pair of boots from a fellow-student. He was seen to come away from his fellow-student's room with the clothes under his arm, but though he lied elaborately when taxed with the theft, he made no effort to conceal the stolen things, but left them lying about

his room. He was expelled and sent home, and a few days afterwards he went to his father's bedroom, packed up his father's shirts, brushes, razors, etc., in a gladstone bag, and sold the lot to a man in the street for five shillings. A man of good social position and respectable ability, the colonel commanding a crack regiment, frequented low pot-houses, where he boozed with private soldiers of the lowest class, gave away his watch and chain and jewellery, and became filthy in person and swarming with vermin. A private soldier, on being reprimanded on parade by a commissioned officer for some trifling untidiness, smacked this officer in the face, and even when in prison, could not be got to see the matter in any other light than that of a good joke. These are cases of true "moral insanity," but what are we to say of the frequent cases in which women of ample means and good social position steal from drapers' shops? A small proportion of these are no doubt cases of moral insanity, but the majority of them are ordinary thieves, who presume upon their social standing and respectability to avert suspicion in the first place, and in the second to carry them scatheless if they happen to be discovered. Such women are not usually discovered to be thieves until they have continued the practice for some time and become bold from immunity. They execute their thefts with cunning and elaborate precautions, and when discovered they plead "kleptomania," which, in such cases, means theft by the well-to-do.

The consideration of moral perversion would not be complete without mention of the subject of perversion of the sexual instinct, about which such a redundant amount of literature has lately been

produced. There is no doubt that there are abnormal beings of both sexes whose sexual inclinations are towards members, not of the opposite, but of their own sex, and these inclinations they gratify by various disgusting quasi-sexual proceedings. The fact being recognised, all has been said that need be said.

CHAPTER VII.

VARIETIES OF INSANITY.

1. Idiocy and Imbecility.

These defects are distinct clinically, legally, and, to a certain extent, etiologically also, from other forms of insanity. They are universally regarded as different degrees of the same defect, but no dividing line is commonly drawn between them. As it is convenient that distinct names should denote distinct things, I am in the habit of limiting the term "idiot" to those persons who are unable to acquire even the simple modes of conduct of the directly self-conservative class, and who require constant supervision and care to preserve them in safety; while by "imbeciles" I understand those who have fully acquired the activities of this class, and can be trusted to go about by themselves and to avoid the common dangers of the house and the streets, but whose intelligence is so defective that they are unable to acquire the indirectly self-conservative activities—that is to say, their industry, and they are often industrious, is not intelligent enough to give it a sufficient market value to enable them to maintain themselves. The distinction is clear, and it is practically convenient, since it enables us to distinguish the imbecile, not

only from the idiot at one end of the scale, but from the normal stupid person at the other. However stupid a man may be, we do not call him imbecile unless his intelligence is so defective that by reason of his defect he is unable to maintain himself; and when this degree of defect is reached, we have no hesitation in applying to him this title.

Idiots and imbeciles are alike in this: that their defect is congenital, or at least original—that is to say, they have not lost their intelligence, they have never attained it. They are not dements, but aments. In them the highest regions of the brain have never attained to the normal standard of the race; their development has come to a premature close. The highest region of the brain is the very last to attain completeness, and when the process of development ceases prematurely, it is this region which remains most defective. There are two ways in which the premature cessation of development may occur. The process may run down from insufficiency of the impetus which set it going, as a bullet may fall short of the target for want of a sufficient charge of powder behind it; or it may have started on its career with a normal and sufficient vigour, and have been brought to a premature close by some extrinsic agent—by disease or accident affecting the brain.

The developmental impetus which the germ receives at conception may be insufficient in very various extent. It may apparently be so extremely deficient that the fœtus perishes *in utero*; or the child may come to the birth, and may linger a few days or weeks, and die at length from no definite malady, but from mere insufficiency of "vital power," or "nervous energy." Instead of being wound up to go eighty years, the

clock runs down in a few days from mere weakness of the spring. Supposing, however, that there is enough of inherent energy to keep the machine going for a few years, there may yet not be enough to carry on the process of development to its normal conclusion. The whole of what energy there is is exhausted in the effort to keep life going, and none is left available for the increase of life. Idiots of this origin—"developmental idiots" or "genetous idiots," as they are called—give evidence of their defect in other ways. They are always short-lived. For the contest between integration and disintegration, of which every life consists—a contest in which integration at first predominates, at first with increasing and then with slackening vigour, then for a long while maintains an equal footing, and at length yields with ever diminishing vigour to disintegration—the idiot is so inadequately equipped that the turning point occurs long before his full equipment is attained. The taper of his life burns so feebly that it is only by sedulous care that it can be maintained even for a few years; and before he reaches his teens, some of the many maladies, which healthy children live through without difficulty and without detriment, extinguish his little flame. The idiot never develops more intelligence than is possessed by the normal infant. Even at ten or twelve years, if he live so long, he may not be left alone without immediate danger to his life. Even physically, it is long before he emerges from babyhood. He lies helpless in his cradle for years after other children of his age are running about and at boisterous play. In many cases he never attains, in no case does he attain until several years old, the command over his sphincters and the intelligence to pass his excrements

appropriately; and the ability to prehend his food and carry it to his mouth is similarly delayed or similarly unattained.

The immediate cause, or rather the essential nature, of idiocy is in every case the non-attainment of complete development of the brain; but the conditions of this non-development are various. The brain may fail to develop from sheer defect in the developmental impetus, by reason of which the process ceases prematurely of its own accord, or it may be cut short by interference from without.

Among the reasons of premature spontaneous cessation of development a few have been assigned with some degree of probability. Of these, senility of either parent seems to be one. The last pregnancy, when the mother is on the verge of the climacteric change, often results in an abortion, often in a child which dies after a few days or weeks of birth, and sometimes in a child which lives longer and proves to be an idiot. If the father is of advanced age when the child is conceived, the child is sometimes idiotic. There seems some reason to suppose that great intemperance on the part of either parent may be a cause of idiocy in the offspring, but looking to the great number of drunken parents whose offspring are healthy, the influence of drunkenness can be only contributory or corroboratory of some other cause. Idiocy sometimes occurs in children who are born prematurely, and in such a case the mode of causation is tolerably obvious.

In the majority of cases, development does not expire from mere want of impetus, but is cut short prematurely by some interference of a quasi-accidental nature. Among these a prominent place is taken

by trauma. Prolonged parturition, with the pressure on the yielding bones of the head that it involves, sometimes produces such structural damage to the brain that it never recovers; and instrumental delivery undoubtedly produces local injury in some cases, resulting in non-development of the motor area on one side, and consequent paralysis, with imperfect development of the limbs, upon the opposite side. Cases of congenital hemiplegia, with stunted growth of the affected limbs, paresis, and very often with choreiform movements of the affected side, spreading, it may be, to the rest of the body, are very common, and are always associated with corresponding imperfection in intelligence, amounting to imbecility and sometimes to idiocy. Some of these cases can be assigned with certainty to injury to the head during birth, while in others the non-development of the convolutions seems to be due to arterial obstruction in early life.

The condition just described is frequently associated with epilepsy, and often epilepsy without such gross structural damage begins in early life, and is then associated with mental defect. It is common to speak of the idiocy or imbecility associated with epilepsy as epileptic, and if all that is meant is a convenient clinical description, the term may be allowed; but if by "epileptic idiocy" be meant idiocy dependent on epilepsy as a cause, the appellation is unwarranted, for we do not know whether the mental defect is due to the epilepsy or whether, as seems much more likely, both are manifestations of the same organic defect in the brain.

Damage may be done to the brain, and its development arrested, by poisonous matters assimilated by

it from the blood in the process of nutrition. To this we attribute the rare instances of imbecility in which the stigmata of hereditary syphilis are recognisable, and in part also, the less rare cases in which the development of the brain ceases, or proceeds but imperfectly, after an attack of specific fever in early youth—whooping cough, measles, scarlet fever, or, less frequently, typhoid. It is to be borne in mind, however, that these maladies are liable to be complicated by meningitis, and therefore may arrest the central development in another way.

Allied to the last group are cases in which development of the brain fails for lack of some indispensable constituent in the pabulum supplied to it. This is unquestionably the case in cretinism, in which the brain partakes in the general defect of the development of the whole body, owing to the lack of the essential product of the thyroid gland. There is another form of idiocy in which non-development or mal-development of the whole body in a constant co-ordinated manner leads us to suspect that the lack of some essential nutritive constituent is at the root of the defect. This is what is known as microcephalic idiocy. In microcephaly the head is amazingly small, but this is far from being the only anomaly, and the associated anomalies are constant, as in cretinism. There is a family likeness among all such cases; they are so much alike in features and disposition that they might all be brothers and sisters to each other. The hair is unusually coarse and thick, the face is large, not only in proportion to the cranium, but to the rest of the body, the stature is diminutive, the nose is aquiline, the eyes are inclined to be large; they differ from all other idiots in their liveliness and rapidity

of movement, they are highly imitative, and are often passionate.

It is probable that to a similar influence is owing the Mongolian type of idiot, so described by Dr. Langdon Down, in which there is exhibited a co-ordinated system of characters in constant association. The small, obliquely placed, widely separated palpubral fissures, the rounded ears, the depressed nose, the large and fissured tongue, the stumpy fingers, the imitativeness and the teachability, form a well-marked group of characters which always go together, and which we are therefore warranted in supposing to be due to a common cause.

Among the common forms of gross damage to the brain in early life is hydrocephalus, which, when sufficient in degree to be recognisable—that is to say, to cause obvious enlargment of the cranium—of necessity gives rise to mental defect, varying from imbecility down to the deepest idiocy. Hydrocephalics are not long-lived, but pretty often live to adult age.

The mental defect that sometimes occurs in the deaf and dumb is usually included among the forms of idiocy under the title of "idiocy from privation," but it is obvious that it is wrongly so styled, for the great majority of the deaf and dumb are, if not of normal intelligence, at any rate able to maintain themselves by their own labour, and are therefore not only themselves excluded from the class of imbeciles, but prove beyond question that the defect from which other deaf-mutes suffer is not due to the privation of hearing and speech. In them there is probably some cerebral defect which underlies at once the deaf-mutism and the imbecility.

2. Dementia.

Clinically the term "dementia" is used to characterise the very large group of cases in which diminution of intelligence constitutes the most conspicuous feature in the malady. It is distinguished from idiocy and imbecility by its history, for whereas in these a normal grade of intelligence has never been attained, in dementia the individual is degraded. A normal grade of intelligence, once attained, has been lost. The one has never risen above the rank of the pauper; the other has once been affluent, but is reduced to poverty. Apart from the history, there is little to distinguish them except the age of the patient, and this is by no means a sure criterion. Idiots, it is true, rarely attain adult age; and a person who is mentally deficient in early life, before the development of intelligence is complete, is not a dement. But many imbeciles live to middle life and old age, and are then indistinguishable mentally from dements; and many young adults become demented and might be taken for imbeciles but for their history. Both imbeciles and dements are liable to outbreaks of excitement, in which the form of their insanity becomes that of mania for the time being. Many patients who, from their quietude and absence of conspicuously active insanity, would be classified clinically as dements, are found, upon examination, to hold delusions of more or less fixed type, and thus might, with equal propriety, be placed in another class. By "dements" as a variety of insanity we mean those insane persons in whom simple impairment of sanity is the most conspicuous feature, whose intelligence, feeling, and conduct are on the whole much diminished, but who may entertain

delusion, who may from time to time exhibit outbreaks of excitement or of perversion of mind and conduct, who may now and then become exalted or depressed. When they exhibit these additional symptoms, the form of the insanity is no longer pure dementia, but still they would be clinically classed among dements, the dementia being still the most conspicuous feature of their condition.

As a clinical entity, dementia is the natural termination of life. In the vast majority of cases life is cut short by accident, or by the quasi-accident of bodily disease ; but when it goes on until it ceases from pure exhaustion of the quantum of energy that it received at conception, it has to pass through dementia on its way to the end. Some degree of dementia, some diminution of the vividness of feeling, of the capacity of thought, of the range and variety of conduct, is the natural and inevitable accompaniment of the decay of the bodily power in old age; and it often happens that the decay of the highest regions of the brain outstrips that of the body, so that the dementia sets in earlier, is more pronounced in degree, and is more irregular in its manifestations than is usual and normal in old age, and is out of proportion to the decay of the bodily capacity. The condition then presented is the clinical condition of senile dementia.

In senile dementia the most conspicuous aspect is defect of memory; the most conspicuous fault is the outbreak of ill-temper. The defect of memory is peculiar, and is characterised by the evanescence of the memory of passing experiences while the memories of long-past experiences are not only retained, but are increased in their prominence, in their intensity, and in the frequence with which they are present in con-

sciousness. The first approaches of senility, which are perceptible between forty and fifty, are marked, as has been said, by an inability to recall newly acquired names, whether of persons or of things, and generally by a want of nimbleness in the use of substantives. As age advances, experiences produce impressions that are less and less enduring, and, in the dementia of old age, become so transient that events are not remembered from hour to hour, and often not from minute to minute. A senile dement will declare that he has not seen for months a person who spoke to him, and whom he recognised and answered, five minutes before he makes the declaration; and no matter how important or impressive the event, its memory is equally evanescent. While he thus forgets with abnormal celerity and completeness current events, he retains with punctual fidelity the memories of experiences that he underwent in youth, and is able to give accurate descriptions of events that happened fifty or sixty or more years ago. Nor is this all; the memories of long-past experiences are not only faithful, often surprisingly and unusually faithful and detailed, but they thrust themselves forward and occupy a much larger share of consciousness than is usual. People in middle life, and normal people in old age, are occupied mainly with the current experiences of their daily life; and the reminiscences of childhood are before the mind but seldom, and for short periods. But in many cases the senile dement lives his childhood over again. He is perpetually maundering about things that happened before his hearers were born, about the events of his school life and his early love affairs, and not very infrequently these memories of bygone experiences take such hold upon him that he actually mistakes

the people about him for the companions of his early life. He addresses his grandchildren by the names of his schoolfellows, and takes his daughter for his first sweetheart.

Together with this peculiar defect of memory there is usually in senile dementia an irritability of temper, a petulance and impatience, which reproduce the peculiarities of a spoilt child. If they want a thing, they must have it on the instant; they cannot wait until it is prepared or until it is fetched; they must have it now, this moment; and if it is not forthcoming they fly into a rage, they stamp, they shout, they swear, and they often offer such feeble violence as they are capable of. Like the child, too, they are easily coaxed into a good humour again; their ill-temper is transient, and its occasion soon forgotten. Another characteristic is the wearisome iteration with which they will repeat the same thing, their defect of memory rendering them oblivious to the frequency of the repetition. Indeed, the repetition of the same story at short intervals to the same person is as common an indication of the advent of senility as is the difficulty of dealing with substantives that has already been mentioned.

As in idiocy, so in dementia, the failure of sanity may be due to premature exhaustion of the developmental impetus, or it may be due to the interference of some extrinsic cause which does not allow the structure to crumble down, but violently pulls it down. To enumerate the causes of dementia would be to enumerate those of insanity, for every other form of insanity is dementia with superadded symptoms. In acute insanity, the superadded activity is so overwhelmingly important and predominant that the

dementia which underlies it attracts no attention. When the active symptoms subside, they leave the dementia outstanding; and thus it is usually said that dementia is a result of a previous attack of insanity; and while this is a convenient way of describing the sequence of clinical events, yet, if we are to be scientifically correct, we ought to say that the subsidence of the active symptoms reveals the dementia which has throughout co-existed with them. Clinically, we call a case of insanity one of dementia, not only when the active symptoms are absent, but when they are but little prominent, or when they are occasional only. Dementia is, in fact, the common form of all insanity, but, when other symptoms are added to the defect of conduct, intelligence, and feeling which constitute pure dementia, we give to the form of insanity some other name, if these symptoms are conspicuous or enduring. If they are not prominent, or only occasional, we still call it dementia. Insanity may come on in middle or early life, may run its course, and may slowly increase for years, until it reaches a great depth of dementia, without at any time exhibiting any of the active symptoms which would enable us to class it as mania or melancholia, and without ever being accompanied by delusion, at any rate by prominent delusion; and such a case would be called one of primary dementia.

Usually, however, the onset of the insanity is attended by active symptoms, according to which the insanity receives its title, and only after it is laid bare by their subsidence does the dementia come into clear view. Hence the great majority of cases of dementia are called secondary, and are looked upon as consequences of previous attacks

of more active insanity. But in every case of insanity the essential feature is defect. In no case does disease make a real, a fruitful, addition to function. The affection of function is always in the direction of loss, of defect, of diminution. In inflammation, tissue change is increased in activity, it is true, but it is carried on upon a lower level. There is increase of process, but there is diminution of function. In glycosuria there may be increased production of sugar by the liver, but there is no real elevation of the function of this organ, and the general functions of the body are not increased, but diminished. And so it is in active insanity. In mania there is great increase of activity; in melancholia and in exaltation there is great increase of feeling; in delusion there is increase in the ability of mental states to enter into coherent combinations. But none of these states of increased activity indicate real operative increase or elevation of function. On the contrary, they are accompanied by, and they indicate, diminution of function. For with all the vivacity of thought that obtains in mania, there is always an inability to appreciate the circumstances in which the individual is, and his true relations to these circumstances. With all the increased activity of conduct, the conduct is on a lower level; it is not, and cannot be, adapted to the circumstances, for the power of adapting conduct to circumstances, the highest function of the brain, is defective. With all the increased intensity of feeling, with the depression or the exaltation, there is still the mal-adjustment of this feeling to the circumstances, and there is still the inability to bring the feeling into correspondence with the circumstances. And the important, the vital disorder, is not so much the increase of activity, as the

degradation of activity to a lower level; is not so much the excess as the defect; is not so much the mania, or the melancholia, or the exaltation, or the delusion, as the inability to appreciate the mal-adjustment of conduct and thought and feeling to circumstances, and to bring about readjustment. So that, in all cases of insanity, the real and important aberration is not necessarily the most conspicuous feature—the over-action—which may be regarded as adventitious, and to a certain degree as accidental, but the degradation of activity to a lower plane; and it is this degradation that is indicated by the term "dementia."

Allowing that in all forms of insanity this degradation of conduct exists, then the clinical kind of insanity will depend upon whether the defect is simple—that is to say, upon whether the activity of mind and conduct are merely degraded and diminished, and upon the lower plane to which they are reduced no excess of activity takes place, in which case it is simple dementia; or upon the kind and degree of inferior and debased activity that goes on at this lower level. When the debased activity is marked by excess of feeling, we call it melancholia or exaltation, as the case may be; when it is exhibited in excess of low-grade conduct, we call it mania; when it occurs in the formation of beliefs, we call it delusional insanity. In any case of simple dementia, over-action may occur at the low level to which the nervous organisation is reduced, and then we call it a case of dementia with outbreaks of excitement, or of dementia with delusions, and so forth. Even when the dementia is deep, when the level to which the nervous organisation has been degraded is very low, some over-action upon this lower plane is usual, and

then we witness those forms of dementia in which the patient is excessively voracious, in which he eats all kinds of filth and rubbish without distinction; in which he collects stones and sticks and bits of string and other rubbish; in which he tears and destroys his clothing and anything he can get hold of; in which he exhibits for many hours every day, and every day for years together, some simple and inappropriate form of conduct; in which he shouts and screams, or pats his leg, or rubs his clothes together as if in the washtub, or rocks himself backwards and forwards in his chair, or repeats the same form of words.

The *degrees* of dementia are practically infinite. They range from the trifling decadence of intelligence, feeling, and conduct that is exhibited by any one after an enfeebling illness, or at the end of a tiring day, down to the almost total obliteration of consciousness and movement in the latest stage of such a disease as general paralysis, in which the patient lies a mere log, insensible to all that is passing around him, passing his motions and urine as he lies, allowing the flies to walk over his face and into his open mouth without showing the least sign of disturbance, indifferent to the sight and smell of food when placed before him, incompetent even to chew the food placed in his mouth, and exhibiting only sufficient intelligence to swallow the pulp with which he is fed.

In this long and uniformly diminishing series we may mark off separate grades where we please, and whatever divisions we make will be wholly artificial; but there is a practical convenience in distinguishing between grades of dementia, and the first grade that we may distinguish is that in which the social activities alone, or chiefly, are defective. In this respect all the

insane, without exception, are deficient. As the higher social qualities are the last to be acquired, so they are the first to be lost when complete sanity begins to fail. We never find an insane person who is quite polite. Ceremonious they often are in an exaggerated degree, but polite, in the sense of exhibiting those little benevolences which are as oil in the running of the social machine, they never are. Even the sanest of the insane are deficient in courtesy. They may bow you into their room with an exaggerated affectation of ceremony, but they fail to offer you a chair; or, if they go as far as this, they exhibit their want of civility by engrossing the conversation, and in talking exclusively about themselves; in their naïve boastfulness; their engrossment in their own affairs; their indifference to the little ordinary duties of hospitality; in the absence of all effort to entertain. In the next grade of dementia the indifference to social obligations is greater. The subject of it will receive you in his shirt-sleeves, he will go about the streets in his dressing-gown and slippers, he will go to a funeral in a shooting suit. If a woman, she will be indifferent to her personal appearance, be untidy, slovenly, and dirty in her dress, will go about with tangled hair, loose stockings, and shoes down at heel. If a man, he swears freely before ladies and strangers, and introduces objectionable topics of conversation without discerning any impropriety in so doing; or he may go further, and introduce loose women, perhaps his own mistress, to his wife and daughters, and even bring her to live in the same house, oblivious to the objectionable character of his conduct. He loses reticence, and speaks familiarly of his family affairs, of his income, of his differences with his wife, of his son's misconduct,

and his daughter's epilepsy, before strangers, in railway carriages, in hotel smoking-rooms, in his club. If a woman, she will talk with similar want of reticence of her confinements and miscarriages, of her husband's unfaithfulness, or her own amours.

The grades of dementia described above may co-exist with full ability to earn the livelihood and administer the means, but in the next grade these modes of conduct also are affected, and the patient becomes either incapable of appreciating the importance of continuing his regular employment and of regulating his expenditure according to his income; or, while recognising the importance of doing so, incapable of appreciating what his income is, and therefore what his expenditure should be; or deficient in ability to follow his employment. In conjunction with these defects we meet with many forms of excessive action upon a lower level, which will be alluded to in other connections.

The lowest grade of dementia is exhibited by those who have not only wholly lost their ability to administer their means, but who are deficient also in that primitive group of activities by which existence is preserved from day to day and from hour to hour. If their food is not brought to them, they will make no effort to provide it for themselves. They have not sense enough to come in out of the rain. If the house were on fire they would not know which way to go to get out of it, even if it occurred to them that it was desirable to escape. Conduct is reduced to finding the way from the bedroom to the sitting-room, from the fireside to the meal-table, and back again; or even this modicum of intelligence is lost. Even in this lowest grade of dementia degrees or

sub-grades are apparent. The most intelligent of these dements are clean in their personal habits. The next lower grade is when they pass their urine under them, but go to the closet to defæcate. Then this is lost also, and their motions are passed in their clothes. Then they become incapable of dressing and then of undressing themselves; and the last acquirement to be lost is the art of carrying the food to the mouth when it is placed before them. Even in this accomplishment there are degrees, for some can use a knife and fork, some a spoon only, and last of all, this implement is abandoned, and the fact that fingers were made before spoons is practically exemplified, since their use is retained longer.

Several clinical varieties of dementia are commonly enumerated, but how far it is correct to describe them as distinct is doubtful. The primary, the secondary, and the senile are separately dealt with. In addition to these, there has been described an alcoholic dementia, which will be dealt with among the insanities due to alcohol, and general paralysis is sometimes termed by Continental writers dementia paralytica. The only form of dementia which has a true clinical distinctness and constitutes a separate clinical entity is that which is known as stupor.

3. Stupor.

This is as nearly a distinct and separate form, as well as variety, of insanity as there is. In pronounced cases it is quite unmistakable, but it is not always pronounced, and an element of stupor may often be distinguished in cases of dementia that would not be called stuporous, and especially in the young, for

stupor occurs usually, though not exclusively, in early life. It exhibits the signs of exhaustion of nervous energy, as though the highest regions of the brain had been emptied of motion and had ceased to act; and it is usually preceded by experiences which are calculated to drain these regions of their energy, and especially by a combination of several such drains. If we wished to produce a case of stupor, we should take a young man between the ages of eighteen and twenty-five, subject him to severe and exhausting bodily fatigue, let him at the same time work hard in preparing for an examination, let him work too many hours a day, and have insufficient food, and especially insufficient sleep; and above all, let him masturbate freely, and at the end of a month or two he will become insane, and his insanity will take the form of stupor. If he is so exceptionally strong that these measures fail to break him down, the last effort of resistance can be overcome by subjecting him to some severe shock. Let him be involved in a railway or other accident, or let him even witness one, or let him come suddenly upon a dead body, or see his schoolfellow dragged drowned out of a river, or let him be assaulted and robbed, or set his house on fire in the night. By such means may stupor be infallibly produced even in a strong nature; and a weak nature will not require such an aggregation of causes. Any one of them will suffice sometimes, any two of them or three of them will usually suffice, especially if excessive masturbation be among them, though this last factor is by no means essential to the causation of stupor.

Whatever the causation, the insanity may be stuporose from the outset; but more usually to the

exhausting conditions that have been mentioned the further exhaustion of a few days of acute insanity is added, and then the stupor comes on. The characteristic of the stuporose patient is his stillness. He stands with drooping head and hanging arms, with open mouth and staring lack-lustre eyes, with a face void of expression, in an attitude void of vigour, and thus he stands all day. Speak to him, shout at him, fire a pistol behind him, flick your fingers within an inch of his eyes, you evoke no response; he exhibits no reaction. Saliva hangs in long ropes from his open mouth, his face is sweaty and greasy, his pupils large, his tongue flabby, his hands blue, his pulse feeble. Of food placed before him he takes no notice, but if it is put into his mouth he will chew and swallow it. Yet, stupid as he is, and destitute of most ordinary reactions, except in the most extreme cases he does not let his urine dribble, nor does he allow his bowels to act inappropriately. He retains both urine and fæces until he is taken to the closet, and when he is there he passes them. As he passes his days in a state closely allied to profound slumber, so he sleeps well at night.

Such is the appearance and such are the habits of a well-marked case of stupor. But the condition is not always as well marked as this, and indeed the degrees of stupor are very various. In milder cases the patient moves from place to place of his own accord, though his movements are seldom and sluggish. He may answer when addressed, but the answer is long in coming, is brief, and is uttered in a faint monotonous voice. He may keep his mouth shut, exhibit palpebral reaction, and even look about

him from time to time; in short, he may exhibit a less degree of the same condition; or, in rare cases, the symptoms are not less, but more pronounced. The patient does not stand, does not move under any provocation. He lies like a log; he passes his motions and urine beneath him. He does not even chew his food. His extremities are not only blue, but deathly cold, and the circulation in them is so defective that sometimes sloughs form. His only spontaneous movements are breathing and swallowing.

While spontaneous movement is absent or minimised, the reaction to "passive" or imposed movement presents three well-marked variations. In the first class, every attempt to move the limbs or the body is met with obstinate and intense resistance, which is the same to every variety of movement and in every part of the body. It is as pronounced in the jaw as in the arm or leg; it is as obstinately opposed to flexion as to extension. It is as difficult to make such patients change their attitude from standing to sitting as to make them change from sitting to standing. The same resistance that is opposed to everything else is opposed to the administration of food; and of course this is a serious matter, and influences the prognosis, which is worse than in the other forms, though not necessarily hopeless. This obstinate resistance to imposed movement, when present in stupor, is always associated with melancholic delusion; it is present in many cases of acute insanity, and then also is usually associated with melancholy.

The second and most frequent variation in the reaction to imposed movement in stupor is the "cataleptic" condition, in which there is no resistance

to the imposition of movement, and in which any attitude that we choose to impose upon the patient is retained by him. When the stuporose condition is not very pronounced, the attitude is maintained for but a short time, it may be only a moment or two; but when the stupor is deep, the attitude will be maintained for long. We raise the patient's arm over his head, and there it will remain for several minutes. Dr. Clouston relates a case in which a stuporose patient was got out of bed, the chamber pot was put into his hands, so that he held it under his penis, and then the attendant went away and forgot him. He remained in this attitude for several hours. In stuporose cases, in which this cataleptic condition exists, the prognosis is usually favourable.

The third variation is that in which there is neither resistance to, nor retention of, an imposed attitude, but a flaccid facility. The limbs can be moved with ease, and fall back after movement into such positions as require the least exertion to maintain. This is the condition to which the term "anergic stupor" has been given.

The mental condition in stupor may be in one of two extreme conditions, or in any intermediate state between them. In simple stupor, of exaggerated degree, consciousness is altogether absent; at least, we can get no manifestation of consciousness while the state continues, and when it is past, no memory whatever remains of the experiences of the stuporose state. In the minor degrees, consciousness is proportionately diminished. Some sign of consciousness can be elicited, some slight reaction can be obtained; after a question has been many times repeated, some answer will be given; after an order has been many

times insisted on, some attempt will be made to carry it out; and when recovery takes place, some glimmer of remembrance will be retained of what occurred during the illness.

The other form of stupor is called melancholia cum stupore, or melancholia attonita, or melancholy stupor, since in it there is always misery, and sometimes the depression is profound. The depression is somewhat different from that of ordinary melancholia, and is more of the nature of panic or horror. The sense of personal unworthiness and incapacity which constitutes melancholia is, indeed, present, but in addition to this is an overwhelming horror at something that the patient deludedly believes to have occurred, or to be about to occur. Unlike the previous form of stupor, consciousness is not only present, but seems, as it were, to be intensified. The patient is keenly alive to everything that is going on around him, but everything that happens is woven into his dream, and goes to corroborate and intensify it. If he is compelled, for instance, to take food, to dress or to undress, to sit down or to walk, this interference is interpreted by him to be the actual beginning of that terrible torture to which he is to be submitted, and the attendants who so interfere with him are his executioners. Hence his stubborn resistance.

The treatment of stupor may be summed up in two words—feeding and rest. The state is one of exhaustion, and the treatment must be directed to restore the exhausted energy. To this end feeding must be copious. Such patients must have much more than the ordinary full diet which would suffice for a healthy person of the same age, and, in young people at any rate, it should be highly nitrogenised—plenty of eggs

and plenty of meat, with a moderate quantity of alcohol. When solid food cannot be administered, of course slops must be given, but essences and extracts are useless. Milk is always valuable, and when food cannot be given in solid form, it should be given, not as liquid, but as thin porridge, that is to say, with plenty of finely divided solids suspended in it. Bread sauce is an excellent food, and may be mixed with pounded meat.

Rest is the complement of feeding. Since energy is exhausted, every demand upon energy must be minimised, and therefore the patient should be kept warm, and usually he should be kept in bed. He must be vigilantly watched to prevent masturbation, which often goes on in a quasi-automatic manner; and sleep, the great restorer of exhausted energy, should be encouraged, and if necessary induced by hypnotics.

The same indications govern our administration of drugs. Cod-liver oil, Easton's syrup, and other preparations of iron, quinine, strychnine, and phosphorus all appear to assist recovery. Baths and friction are useful, but massage is not advisable.

In simple stupor, the proguosis is usually favourable. It occurs commonly in young people, in whom recuperative power is active, digestion good, and sleep easily induced; and, moreover, in this form there is neither refusal of food nor exhaustion from struggling during its administration. In melancholy stupor the prospect is much less favourable. It may occur at any age; sleep is usually difficult to induce, aud the strenuous resistance to feeding and other necessary offices keeps a perpetual draiu upon the strength. Hence recovery is in this form less frequent, it is longer delayed, and a much larger proportion of

the cases end either in death or in permanent insanity.

In other characters, as well as in those mentioned, melancholic stupor shades off by insensible degrees into acute insanity, and many cases which would usually be classed as acute insanity exhibit the panic and horror that are so prominent in this form of stupor. When, as not seldom happens, the subject of melancholic stupor exhibits sudden outbreaks of impulsive violence, directed either against himself or against others, or similarly impulsive outbreaks of destructiveness, the case approaches in character to ordinary acute insanity; and the affinity of the two forms of insanity is further exhibited in the occasional transition of the one into the other. The stuporose patient loses his apathy, his outbreaks of excitement become more frequent, and he passes, on his way to chronic quiet dementia, through a period of ordinary acute insanity.

4. Acute Delirious Mania.

This is one of the most definite and clearly distinguished clinical varieties, as distinguished from forms, of insanity—one of the few varieties of insanity which runs a very definite course. No other variety of insanity exhibits such extreme and continuous excitement as acute delirious mania. Even in acute insanity the patient has his moments of tranquillity; has snatches, perhaps prolonged periods, of sleep; will occasionally answer questions intelligently; will regulate his conduct with some reference, however distorted, to surrounding circumstances;

will sometimes recognise his friends, and will have some regard to the decencies of life; but in acute delirious mania the alienation is more profound. The raving is continuous. It goes on incessantly, day and night, the whole twenty-four hours round. It is quite incoherent and meaningless, a torrent of unintelligible utterance. And as is the vocal movement, so are the other bodily movements. The restless activity is extreme and incessant; the patient roams about with ceaseless restlessness, he is never still, he never lies down, he never sits down, he is always on his feet, always in movement. He neither eats nor sleeps; sometimes he will drink, sometimes not; but in any case he never eats voluntarily; and is with the greatest difficulty induced to do so. The length of time that he goes entirely without sleep is astonishing. Day after day and night after night he keeps up his incessant movement. You cannot engage his attention; he takes no notice when spoken to. He is indifferent whether he is dressed or naked; heat and cold he does not notice; the calls of nature he does not answer: his bladder becomes full, and over full, until his urine dribbles away. Withal his temperature is raised; it is seldom much raised, but it is two or three degrees above normal, and this feature alone distinguishes this from almost every other variety of insanity. Such excessive and continuous waste of tissue and of energy cannot endure long without producing exhaustion. After a few days of this extreme restlessness and sleeplessness, the patient is no longer able to remain on his feet; he sinks to the ground, but still he continues to rave in a voice hoarse and well-nigh inaudible from incessant use; still he continues to toss about his weary limbs;

and when this stage is reached, the end is not far off. His mouth becomes dry, sordes accumulate on his lips and teeth, his heart's action fails, his pulse flutters, his breathing becomes a succession of sighs; but still he mutters in a hoarse whisper his unceasing babble, until, at the end of seven or eight days, he dies of exhaustion. Such is the course of a typical case of acute delirious mania, the "brain fever" of older writers, the most rapid and most terrible variety of insanity.

It affects both men and women, and usually those who are in the prime of life—from twenty-five to forty—and is usually preceded by some prolonged and efficient debilitating occurrence, such as an exhausting illness, deficiency of food, rest, and sleep, anxiety, disappointment, or excessive intellectual labour.

Acute delirious mania is practically always fatal. If a case is so mild as to admit of recovery, it would be one of acute insanity rather than of acute delirious mania. As to treatment, a padded room is essential. In no other surroundings can the restlessness of the patient lead to so little bruising and other injury. Abundance of food must be given by the stomach tube, and mingled with it should be given brandy, strychnia, and large doses of hypnotics—paraldehyde, sulphonal, and trional being the best. For all that we can do, however, the patient will almost surely die; and in the rare cases in which the bodily health recovers, the patient remains a mental wreck, a hopeless dement for the rest of his days.

5. Acute Insanity.

The boundary between this and the previous variety of insanity is not always well defined, but generally, the whole course and symptoms of acute insanity are less acute, less rapid, less exaggerated and fulminating, than those of acute delirious mania; recovery is not infrequent; and what differentiates them more sharply is that in the latter disease the form of insanity is always that of mania, while acute insanity is of several types.

The causes and antecedents of acute insanity are those of insanity in general. It may occur at any age after sixteen, and in very rare cases before that age, but is most frequent in the most vigorous period of life—from twenty to forty-five.

Acute insanity is rapid, sometimes sudden, in its development. The very first thing to attract attention and to indicate insanity may be a determined attempt at suicide—a leap from a window, a cut throat, or a dose of poison, or it may be some outrageous or violent act directed against other people. But usually there is some warning of what is going to happen. For days, or even weeks, beforehand, the patient sleeps little, dreams much and vividly, eats little, finds himself unable to attend to his business, feels ill, and perhaps seeks medical advice. Headache is rare, but often the mind is confused, and the patient dreads lest he should be going out of his mind; or he gets restless, talks too much, pays too many visits, writes unnecessary letters, sends unnecessary telegrams, neglects or mismanages his own business, and meddles with that of every one else.

After a few hours, days, or weeks of these initial symptoms, the disease becomes fully established, and then exhibits several forms distinguished by the following characters: In the first form the patient is excited—that is to say, his movements are in excess; he talks with rapid fluency and disconnectedly; he utters sometimes a stream of words in which each suggests the next by sound or meaning, but which are not connected into sentences, such as "wiudow, wind, blow, thrashing, smashing," or they may be connected into sentences which are similarly irrelevant to each other, as "open the window, give me a glass, drink your brandy, isn't he handy? what a dandy! fine feathers make fine birds," etc. Together with verbal utterance, other movements are in excess, and are similarly disconnected. The patient roams about the room, he rushes to the door or the window, he picks up every movable object and throws it down again, or throws it about the room, or converts it to some use for which it was never intended. He upsets the water-jug and the chamber-pot, he overturns the furniture, he breaks the windows, he throws the chairs about, he assaults those who endeavour to control him, he tears his clothes off, he or she swears, blasphemes, and talks obscenely; and all this he does, not with any settled or intelligent or enduring purpose, but aimlessly, erratically, and out of the mere exuberance of his energy.

A second type is the melancholic. In this type the activity is less, and there is a dominant delusion. The patient believes that he is ruined, or that he is damned, or that he has some frightful bodily disease, or that he is morally a hopeless outcast, and to this

belief he gives utterance all day long. He is usually still over-active, though his over-activity is less. But he does not sit down, he does not rest; he shuffles about the whole day long, giving vent, not with shouts and outcries, as in the previous type, but in a muttering, plaintive, miserable voice, to his conviction of his own ruin, his unworthiness, his incapacity. He weeps, he moans, he wrings his hands, he tears his hair, he beats his breast; he importunes you for a ray of hope, a glimmer of comfort; but he refuses to be comforted. He repeats the same formula over and over again a thousand times a day: "Oh! my poor soul." "I am so wicked!" "I can't pay you!" "My poor wife and children!" "Oh! dear; oh! dear." "Oh! my God," and so forth. He is less inclined to the impulsive outbreaks that are so common in the previous type, but he is very likely to commit suicide, and he is more persistent and obstinate in his refusal of food, while he is less neglectful of personal cleanliness and less apt to pass his motions and water beneath him.

A third type is the suicidal. Acute insanity of suicidal type often displays as much restlessness and over-activity as is seen in the first type—that of acute mania. In every form of acute insanity attempts at suicide are common events, but in this form the whole attention and energy are concentrated upon the single purpose of suicide. The sufferer from acute mania will try to jump out of the window, or will take up a knife or a razor and cut himself with it, not, as far as can be judged, with any deliberate intention of suicide, or of anything else, but out of pure restlessness and meddlesomeness, combined with inability to appreciate the nature and quality of his acts. In this, as in every other type of acute insanity, there is sure to be, at

some time, refusal of food, but the refusal does not appear to be the expression of any deliberate intention of suicide. But in this third variety the whole power of the mind is absorbed in, and devoted to, the single object of suicide. The mind is far more alert than in the other types; the power of adapting means to ends is retained to a far greater extent; and the end which is sought with inflexible determination, and with the most flexible adaptation of means, is suicide. To effect this end they are continually on the watch. In every object they see a possible means, and they set themselves with much ingenious contrivance to reach it, and possess it. They will promise to eat, if they may eat by themselves, hoping thereby to be left alone. They will break glass and crockery to get a cutting instrument; they will ravel out the threads of their clothing to make a cord which they can tie round the throat; they will swallow anything that seems unwholesome; will bite a piece out of a tumbler or a cup, and try to swallow the fragment; will batter the head against the wall or floor, and try by the most unusual as well as by the most obvious means to effect their purpose. If they find suicide impracticable, or while they are waiting for a favourable chance to effect it, they will occupy the time with efforts to reduce their comfort and give themselves pain, or even mutilate themselves. They will try to gouge their eyes out with their fingers, to tear the cheek with the finger in the mouth, to tear out the testes or to cut off the penis. Prevented from tying a ligature round the neck, they will endeavour to tie it round the leg or the penis. Prevented from knocking their heads against the wall they will take the skin off their knuckles by the same means, and so on.

A fourth type is the silent, obstinate, resistive. Patients of this type do not speak. When spoken to they do not answer. They make for the door, the window, or the fire, and when restrained will continue for hours the same silent, dogged, determined effort to reach the desired destination. They, too, undress themselves, but they do so, not, as the acute maniac does, from the mere exuberance of their activity, which must find some vent, it matters not what, which, when restrained from taking off the coat, begins to unbutton the waistcoat or trousers. A patient of this type undresses himself with the same blind, dogged obstinacy that he does everything else. He persistently, again and again for hours together, attacks the same button, or tries to remove the same garment in the same way. He, too, refuses food, but he refuses it, not, so far as can be judged, with suicidal intent, but with the same resistiveness with which he stubbornly opposes everything that is done for him—refuses to be dressed and to be undressed, to be sat down or stood up, to go to the closet and to come away from it, to walk about or to stand still.

A fifth type of acute insanity is the sexual. A sexual proclivity is usually perceptible, as is the suicidal proclivity, in every case of acute insanity; but, in the one matter as in the other, there are cases in which the proclivity becomes so pronounced, assumes such dominance, is by so much the most prominent and conspicuous feature, as to constitute a distinct type of the malady. The sexual type is exhibited by women almost exclusively. Few things are more surprising in insanity than the obscenity and filth that are uttered by women, and even by young girls, well bred and carefully brought up, of pure lives, and

previously innocent conversation and behaviour. They curse and swear like troopers; they use expressions of obscenity and blasphemy of which a costermonger would be ashamed. Nor is it only in their speech that they display lewdness and indecency. Insane women of this type make shameless overtures to every man to whom they have access. Not the gardener nor the footman; not the waiter in the hotel in which they are taken ill; not the medical man who attends them; not even their own brothers or fathers, are exempt from their libidinous advances. They ogle and leer, they throw themselves into unseemly and indecent attitudes, they expose their breasts and legs, and, when all this is ineffectual, they do not hesitate to ask in plain terms for what they want—to call out of the window to a passer-by to come to bed with them, or even, in plain Saxon, to have intercourse with them. As the melancholic and suicidal varieties of acute insanity are often called acute melancholia, so the sexual type is often called nymphomania; but all are really varieties of the same malady, in which the one or the other feature, common to all, becomes exaggerated and assumes unusual preponderance.

Whatever the type of the acute insanity, there are certain features common to them all. All, as we have seen, are potential suicides. In all there is at one time or another refusal of food, alternating, it may be, with wolfish voracity. In all there are sexual proclivities, showing themselves in frequent shameless masturbation, as well as in other ways. In all there is inattention, not only to ordinary tidiness and cleanliness, but to the calls of nature. They pass their urine and motions under them, either occasionally or habitually, according to the gravity of the case. Their

clothes soon become ragged, dirty, stained, and caked with spilt food. In all cases of acute insanity, sleeplessness is a very prominent and very important symptom. It has usually existed for days or weeks before the insanity declares itself, and it is aggravated when this takes place. The length of time for which they will maintain their excessive activity without sleep, or with only an hour or two of sleep per night, is astonishing. They are always constipated, and the tongue is usually foul, and the breath stinking. They have usually lost a great deal of weight before the insanity declares itself. When they are sufficiently rational to give an account of themselves, they are found to be suffering from delusions. In the melancholy type these are the ordinary delusions of melancholia, sometimes combined with delusions of persecutory type. In the excited or maniacal type the delusions are of a very extravagant character. The patient has visited heaven and made the personal acquaintance of the Almighty, or he has attended his own funeral, or he has some other equally extravagant belief. Hallucinations are rarely prominent, and often not present in acute insanity, and when present are usually visual. It is rare for patients with acute insanity to "hear voices," and those who do are usually of the resistive type.

Acute insanity is very variable in course and duration. In a few cases it is very evanescent, and clears up completely and permanently in twenty-four or forty-eight hours; and such cases constitute what has been called mania transitoria. Usually it lasts in full intensity for from one to four or five weeks, and if the longer term is reached, it then terminates fatally from exhaustion. The earlier improvement begins, the more

favourable the chance of recovery; the longer the full intensity of the malady lasts, the graver the prognosis. Four or five weeks of really acute mania will kill the strongest man, and a shorter term, even if not fatal to life, is very apt to leave irreparable damage to the brain and mind. Of the five types described, the resistive is the most unfavourable to life, and the suicidal is the most apt to leave permanent insanity. When recovery takes place, it often takes place suddenly. The patient has a night of long, sound sleep, and wakes up well, or so nearly well that a few days completes the recovery; but this can only happen when the malady has been of sudden onset and short duration. In other cases, improvement is gradual, the excitement subsides, the melancholy clears away, and the patient passes into a state of slight, or it may be of grave, dementia, from which he may gradually emerge, or which may remain permanent for the rest of a long life. In other cases the subsidence of the excitement is simultaneous with fixation and systematisation of the delusions, and the acute insanity merges without break into paranoia. Even when recovery is rapid and appears complete, the patient should not return to the active duties of life for at least a third or half a year, and he will always be liable, on a recurrence of the conditions, to a recurrence of the malady.

The effective treatment of acute insanity, like that of stupor, which might be made a sixth type of this variety, may be summed up in two words—food and sleep. In the rare cases in which a patient has been eating and sleeping fairly well up to the time of the outbreak of insanity, the prognosis is extremely unfavourable; and the more confidently we can attribute the outbreak

to deficiency of food and sleep, the more confidently may we expect that the administration of food and the procurement of sleep will be followed by recovery. As the sleeplessness depends very largely upon the inanition, our first care must be to administer abundance of food. The patient must not merely be fed, he must be over-fed. He must have food in superabundance and excess; he must have twice or three times as much as would suffice for a healthy man of his age and weight. What he needs is not extract of meat and Brand's essence, and Bovril and Valentine's meat juice, and similar concentrates, but bulky, ordinary food—meat and potatoes, bread and butter, rice pudding, and such like viands in great quantity. And here we are met at the outset by two serious difficulties—first, that digestion is very frequently disordered, and, second, that the food is very frequently refused.

The first difficulty we may often disregard. The stomach has perhaps been pampered and humoured for months by discarding first one food and then another that has been thought to disagree with it, and if it is taken firmly in hand and compelled to receive all kinds of bland food, it will do its duty uncomplainingly. A more serious matter is that when food has for months been taken in small quantity only, the stomach has become contracted, and till it has been educated to receive larger quantities, it will resent over-distention by vomiting. In such cases we must be content to feed very frequently, and gradually to increase the amount given at each meal.

The other difficulty is far more serious. Refusal of food, obstinate resistance to the administration of food, is a common feature of all the types of acute insanity,

and unless it is overcome, the patient will certainly die. It must therefore be dealt with promptly and vigorously. The patient must be forcibly fed. There are degrees of persistence of refusal. Some patients will not feed themselves, but if the food is put to the mouth, they will take it with docility, chew and swallow it. Others will take it only if spoon-fed; the rest—and these are the majority—will refuse and resist every attempt to feed them. Various methods of forcible feeding are in use for such cases, but I have no hesitation in condemning all but one. The nasal tube, a small tube of soft rubber introduced into the nostril, has been used very largely, but it is so easy for a suicidal patient, or even a greatly demented patient, to inhale the food thus admiuistered; and so many cases of gangrene of the lung have followed the use of the method; that it ought to be abandoned, and the æsophagial tube used in every case.

Of course, in this case, solid food cannot be given in solid form; but the same food can be given if it is first pounded up in a mortar and made into a thin pulp with milk, and then there is the advantage that the appetite and palate need not be consulted, and food, stimulants and drugs can be administered together. If a really copious and excessive amount of food is introduced, the difficulty about sleep is already half overcome; but there are few cases, though there are a few, in which food alone is sufficient to procure sleep. In most cases hypnotic drugs have to be employed. Our choice of these has greatly extended of late years. There was a time when opium was the only soporific; then chloral and bromide of potassium were added; now all these are abandoned in the treatment of acute insanity, and newly discovered

drugs are found to be more efficacious and attended by fewer disadvantages.

The question often arises, what is to be done upon the instant to control a patient who has suddenly become acutely insane in his own house, or in an hotel, or elsewhere; who is tearing up his clothes and smashing the furniture, who has worn out his friends and the ex-policeman who has been called in to help in controlling him? In this state of things we have in hyoscin an agent of the utmost value. It is made up for hypodermic use in minute tabloids, and one of these can be dissolved in a cup of tea or a glass of wine, or, if needs must, it can be given hypodermically, and its action is very speedy and very effectual. The usual doses—$\frac{1}{200}$ and $\frac{1}{175}$ of a grain—are of no use in acute insanity, and at least $\frac{1}{50}$ should be given under the skin, or $\frac{1}{30}$ by the mouth. I give $\frac{1}{25}$ hypodermically, and have never seen any ill effects from its use. Ill effects, and fatal effects, used sometimes to attend its use when the drug was first introduced, but no case has been reported of late years, and I cannot help thinking that when it has been fatal, either the drug was impure, or it was insufficiently mixed, and larger doses were given than were intended. At any rate, if there is any risk attached to its use now, it is a risk that ought to be run, for the danger of the drug is in any case not so great as the danger of allowing the patient to die of exhaustion; and therefore it should be given. In this way a breathing-time may be obtained, during which the friends are freed from the absorbing task of immediate attendance on the patient, and are at liberty to take the necessary steps to have him removed to an institution. For this course is essential in every case of acute insanity, except, perhaps, when

the patient's friends are very wealthy, and can arrange for at least three attendants and a medical man to reside in the house with him, and even then the conditions for his control and recovery are not so favourable as they would be in any well-conducted institution. It is scarcely justifiable to keep up a full administration of hypnotics merely for the purpose of facilitating the control of a patient, and unless this is done, there will be times when two, and even three, attendants will be insufficient to control an acute maniac. He should be in a place where practically unlimited help can be brought to bear to get him undressed, or dressed, or fed, as the case may be. There is nothing so likely to produce bodily injuries as insufficiency of help in these operations.

There is a practical measure of great value, which is much insisted upon by Dr. Savage in the management of acute insanity so long as the patient is kept at home, and this is to remove the patient at once to the ground floor, bag and baggage, bed and bedding. Then if he jumps out of the window he can do himself but little harm.

Useful as hyoscin is as a calmative and controller of excitement upon emergency, it is not a drug to be used as an hypnotic, nor is it suitable for prolonged administration, for tolerance is soon established, and the dose, to be effectual, has to be increased. When we desire an hypnotic effect, the most efficient drug for ordinary use in acute insanity is sulphonal, a drug that has the great advantage that it not only induces sleep at night, but has a calmative influence upon the patient for the following day. Its disadvantages are various. In the first place, its action is delayed, and it varies much in the period after administration at which its effects

begin to be felt. Sometimes it will act in an hour, sometimes not for two, three, six, or as much as twelve hours. It is therefore manifestly inappropriate when we desire an immediate effect. Trional, upon the other hand, is a drug whose action is far more speedy, almost as effectual, and much less lasting. It has none of the delayed calmative effect that is so characteristic of, and important in, sulphonal. The best effect of both drugs is obtained by a combination of the two. A combination of about $\frac{1}{3}$ trional with $\frac{2}{3}$ sulphonal is most valuable. The trional puts the patient to sleep, and the sulphonal keeps him asleep—ten grains of one to fifteen grains of the other, or better, fifteen grains of the one to twenty-five of the other. If this is given the first night, a less dose will suffice for the second, a still smaller for the third, and on the fourth night the patient will usually sleep without drugs. The same hypnotic should not be given for long together. They are much more effectual when changes are rung upon them. In the melancholic form of acute insanity, and when there is cardiac weakness, paraldehyde is a very valuable hypnotic.

Mention has already been made of the disorder of digestion that is so frequent in acute insanity. In any case in which it is ascertainably present, it must be treated. There are cases in which the contents of the stomach undergo putrefactive or fermentative changes which render them unspeakably foul and offensive, and when this is the case, or whenever the breath is very foul, or especially when foul gases are expressed from the œsophagial tube when the end reaches the stomach, benefit will be derived from washing out the stomach at regular intervals.

In all cases of acute insanity, certainly in all which

are severe or prolonged, institution treatment is essential. In many cases it is far better for the patient to have the comparative freedom of a padded room than to be perpetually checked and interfered with by attendants.

The first favourable symptoms are the establishment of natural sleep, the voluntary taking of food, subsidence of excitement, and commencing appreciation by the patient of his circumstances. If all these are concurrent with a gain of weight, and occur within the first fortnight, there is reasonable hope of complete recovery. But if sleep is established, food taken, and weight gained, while still the mind does not improve, the prognosis, while improved as to life, is very gloomy as to recovery of reason ; and if improvement is delayed beyond the first fortnight, every day's delay is of serious consequence.

6. Fixed Delusion.

This is a very well characterised and very frequent variety of insanity, but is not often seen outside of asylums. It is one of the terminations of acute insanity, and the patient, who had been admitted for the acute malady, is retained for the rest of his life for the fixed delusion and the accompanying dementia, in which it ends.

The character of the delusions is various, but commonly they are delusions either of exaltation or of alteration of part of the self. To this variety of insanity belong practically all the kings, queens, emperors, and millionaires who are not general paralytics, and to this also belong the people who have weasels, wolves, or crabs in the stomach, glass legs, no

backs to their heads, whose brains have been taken out, and who suffer from other changes of the personality.

The distinguishing feature of the insanity is that the delusion has practically no effect upon conduct. The kings and emperors are content to pass their lives in the most menial occupations, scrubbing floors and carrying coal; the queens and duchesses work contentedly in the laundry; the millionaires see nothing inconsistent with their wealth in holding a horse for a copper, or begging for a bit of tobacco. What incapacity they have for more intelligent employment—and the incapacity is often considerable—they owe to their dementia, and not to their delusion. The delusion is not often prominent. It does not absorb much of the attention of the patient. He does not obtrude, it and make himself a nuisance by worrying about it in season and out of season, as the paranoiac does. He is often rather reticent about it, and has to be questioned and cross-examined before he will confess to it; but once started on the subject, he is usually difficult to stop. In any case, not only does it not influence his conduct, but it does not much affect the rest of his mind. The king and the millionaire do not appear particularly elated by the knowledge of their exalted position or their wealth. The man whose legs are of glass, or whose stomach is tenanted by an unbidden guest, does not worry about crural fragility or his parasite. The delusion forms a small and unimportant part of his mental life, and he pursues the tenour of his way without regarding it. A large number of the inmates of lunatic asylums exhibit this variety of insanity.

The bodily state exhibits nothing characteristic.

The malady is essentially chronic, unchanging, and irrecoverable. The patients remain in the same state of dementia and delusion for the rest of their lives; liable, like other dements, to outbreaks of excitement from time to time; subject to the common ailments of humanity, of one of which, in the fulness of time, they die.

7. Paranoia.

This is both a form and a variety of insanity: that is to say, it is not only well characterised as an existing state, but the state is confined to a single variety of insanity, which runs a definite course, and it is not seen in any other variety. By a systematised delusion is meant a delusion which, to use the language of modern psychology, constitutes an "apperceptive system." It is an organised body of (false) knowledge, and it differs from other delusions in the fact that it colours the whole life of the patient; it regulates his daily conduct; it provides him with an explanation of all his experiences that are otherwise inexplicable; it is his theory of the cosmos.

For instance, his delusion is that he is influenced by telephones. Whatever he does, and whatever happens to him, that is in the least out of the ordinary course, is due to the telephones. He sees a pretty flower, and, forgetful of the regulations in that case made and provided, he plucks it; then he remembers the rule against picking flowers. It was the telephone that made him pick it. Intent upon the beauty of some floral gem, he trips over a grass verge; it was the telephone that made him trip. He sits down to write, but finds his mind confused; telephones again. He

plays whist, and revokes; the telephone made him do so. He plays billiards and loses; the telephone kept his balls out of the pockets and put his adversary's in. His nose begins to bleed; the telephones did it. He gets annoyed and throws his book across the room; the telephone prompted him, or possessed him and threw the book for him. He sees two strangers meet and chat on the opposite side of the street; the telephone is talking to them about him, or they are talking to him through the telephone, or the telephone is mixed up with them in some mysterious way.

The precise character of the systematised delusion is very widely different in different cases, but in all there are several features in common. Through every systematised delusion there runs the thread of persecution, which connects them all together in a single well-characterised group. Every systematised delusion is a delusion of persecution. The influence, whatever it be, that acts upon the patient, is always an influence adverse to him. Secondly, the delusion is a fixed delusion; it endures without material change, often without appreciable change, for years and years. Thirdly, it is associated more closely and more conspicuously than any other form of delusion with confusion of thought. Fourthly, more often than any other delusions it is associated with hallucination.

The *character* of the delusion is very various, though, as has been said, the idea of persecution runs through them all. The persecutor may be a specific individual, and in that case may have a real existence or be wholly imaginary. In a certain case, *e.g.*, the patient was annoyed by a man whom he had never seen, but whose presence he felt, whose name was Girardot, and who haunted the lanes and fields about the patient's resi-

dence, armed with an apparatus of mirrors and lenses by which he was enabled to see at all times what the patient was doing, and to locate him so accurately that he could pour upon him without fail a stream of electricity, which produced baleful effects. Not infrequently the persecutor is identified as the superintendent of the asylum, or the governor of the gaol, in which the patient has been detained, and who still, by his emissaries, torments the patient, years after the latter has been transferred to other care. They haunt the neighbourhood; they are under the floor, in the cellars; they are in rooms above, or on the roof; they are in adjoining rooms; every mishap, every inconvenience, every disappointment that happens to the patient is ordered by them. Or the persecutors are not specifically identified, but pervade the community. The people in the streets talk to each other about him; they look at him in meaning ways; if they smile or laugh, it is in contempt or derision of him; if he catches scraps of their conversation, this also has reference to him. He sees two men meet who are total strangers to him; they shake hands, they smile, and ask each other how they do; the shake of the hands is a Masonic grip by which each recognises that the other is in the plot; the smile is an expression of triumph that they have succeeded in their nefarious design against him; the question and answer, while seemingly innocent, really refer in some way to him, and means that he is a blasphemer, a murderer, an adulterer, or what not. In some cases the delusion is of bodily disfigurement; for instance, the nose is too large, is so large as to attract attention, and the universal topic of conversation, wherever the patient appears, is the size of his nose.

Very often the delusion is of being followed about and watched, it may be by the police, but more often by unofficial watchers. Sometimes the vigilant enemy is a single specific individual, sometimes two or more, sometimes a number of unspecified individuals.

Perhaps the commonest of all the forms of persecutory delusion is that of being acted upon by some unseen influence; and usually the latest conspicuous discovery in physics is pressed into the service, and becomes the persecuting agent. In the early part of the last century, paranoiacs were persecuted by steam engines; later, the telegraph was the means of their persecution; then, as successive discoveries were made, electricity, hypnotism, mesmerism, animal magnetism, telephones, the Röntgen rays, and wireless telegraphy were made responsible for their sufferings. The majority still ascribe their persecution to electricity, and the "electrics" constitute the largest class of paranoiacs. But they are assiduous readers of the newspapers, for they see in the daily prints references to themselves in the items of news and in the leading articles; and whenever a new physical discovery is announced, it is appropriated by them as a means of persecution, and the more obscure it is in its nature, the less they are able to understand of the new process, the more it commends itself to them as a persecuting agent. This seems to be the ground upon which electricity is so often selected. Sometimes, however, nothing sufficiently mysterious exists among the known natural agents, and then a new agent is invented to account for the sufferings. Dr. Conolly Norman gives an instance of a patient who ascribed his persecution to a "typhone," and of another whose thoughts were "read by a hypophone and translated into logarithms."

A patient complained to me that he was persecuted by "infernal traces mystery"; another was annoyed by "injury stuff like smoke"; and another by microscopical glasses.

While it is not very uncommon for the centre of the persecution to be some bodily peculiarity—the large nose or the deformed mouth, which attracts the attention of bystanders, and sets them talking about it, and nudging each other as the patient goes about the streets—it is more common for the mysterious influence to be exerted upon the mind. Other people read their thoughts, or think their thoughts, or put thoughts into their minds, or deprive them of the power of thinking, or say or do things through them which they would not say or do of themselves.

Delusions of persecution are always associated with confusion of mind. No doubt with all delusions there is more or less confusion, or the delusion would not continue; but in no case is the confusion of mind so conspicuous and complete as it is in cases of paranoia. The delusion is in no case so clearly defined, so sharply cut, so definite in expression, as it is in the delusions, for instance, of melancholia and of exaltation. The confusion is often conspicuous in the very statement of the delusion itself, as in the case of the man who was persecuted by "infernal traces mystery," or when a man is referred to in terms which he cannot repeat, by persons whom he has never seen, under circumstances that he cannot identify; but if the delusion itself appears to be definite, as when the persecution is the utterance of specific expressions by a specified person, a little conversation, a little questioning of the patient, will nearly always elicit a statement which is a mere farrago of nonsense, an unintelligible jumble of words.

Hallucinations are more constant and more prominent in paranoia than in any other variety of insanity. They may be referred to any of the senses, and are by far most frequently auditory, and least often olfactory. Visual hallucinatious rank next in frequency to auditory, gustatory come next, but are rare, and the olfactory and those of common sensation rarest of all.

Auditory hallucinations are the most frequent of all, and are of serious import in three ways. In the first place, the "voices" are often minatory, abusive, and objurgatory, and when this is the case they may lead the patient to retaliate with violence upon some innocent bystander or passer-by to whom he attributes them. In the second place, the "voices" are often mandatory and imperative, or persuasive and urgent. They command or they incite the patient to do things, and the acts thus proposed to him are often objectionable, criminal, or even murderous in character. They are usually resisted and repelled, but if they continue, as they usually do, for a long time, the resolution of the unfortunate patient at last breaks down, and he commits the act to which he has so long been urged. In the third place, the existence of auditory hallucinations gives a very unfavourable colour to the prognosis of any case in which they are well established. This is true, however, in increased degree, of other forms of hallucination. Auditory hallucinations are occasionally heard on one side only. Sometimes the voice is always the same, sometimes two or more voices are heard, and in some cases they argue with one another, and in that case one may abuse and the other defend the patient. The sufferer usually recognises completely at first the unreal character of the voice, and that it is not produced by any external

agent; and afterwards, even although he may attribute the voice to bystanders, there is evidently some quality hy which he distinguishes it from the voices of real people, for he always speaks of it as "the voice" and "the voices." Deafness is, of course, no har to the occurrence of auditory hallucinations.

Visual hallucinations are much rarer, upon the whole, than auditory, though they are much commoner as epileptic auræ, which stand on quite a different footing from the hallucinations of paranoia. These are usually quite elaborate, and may consist of faces or figures—those of delirium tremens have often been described—or sometimes they consist of words or sentences, luminous or not, standing out as if printed upon the surface of whatever the patient is looking at. In such cases the words are usually of the same character as the "voices" in auditory hallucination—that is to say, they are blasphemous or ohjurgatory or obscene.

Evil tastes and smells are sometimes, but rarely, complained of. The taste is always disagreeahle, usually metallic, and the smell offensive. One patient complained to me that he "smelt hlood."

How far the frequent sexual delusions of the paranoiac are dependent upon hallucinatory common sensation it is impossihle to say, but if they are so dependent, hallucinations of this class would be among the most frequent, for nothing is more common than for female paranoiacs to complain of heing raped and outraged in complex and horrible ways, and for male paranoiacs to complain of sodomy and various sexual tamperings heing practised upon them.

The *conduct* of the paranoiac is dominated hy his delusion. In this is the marked and conspicuous

difference between paranoia and mere fixed delusion. In the latter, the patient goes about his work like an ordinary mortal, and refers to his delusion at intervals only, between which there is nothing to distinguish his conduct from that of a sane person. But the delusions of the paranoiac dominate his whole life. They are with him every hour and every minute of the day. They keep him from his work, they iuterfere with whatever he tries to do. However he is occupied, he feels the electric shocks, he hears the voices abusing him or conspiring against him, he is conscious of the vapours pouring upon him, and under these circumstances he cannot work, he cannot maintain any steady employment. If we watch him, we see him twitch, start, and jump, as the shocks affect him, or we notice his expectant attitude; we see him absorbed in contemplation of his visions, or we hear him answer and expostulate with his hallucinatory voices. Another thing that prevents him from pursuing his business is the necessity of avoiding his persecutors. To this end, he eschews going out in the daytime; he cannot remain long in one residence; he frequently and suddenly changes his lodging; if he is well-to-do, he travels from country to country to escape from the annoyances, hoping in each to find more efficient police, able to give him protection. But the most important character of the conduct in persecutory delusion is the tendency to violence and to homicide that so often exists. The continuance of the persecution, the futility of all measures taken against it, the refusal of the authorities to interfere, the general neglect of, and disbelief in, his trouble, at last generate a degree of exasperation which prompts, it may be to violence, it may be to murder. When the persecutor

is identified with any specific person, the violence is, naturally, directed against that person; but when, as so often happens, no accessible person or no specific individual is identified as the persecutor, then the violence may be directed against any one, and is usually directed against some person in a prominent position, the avowed motive being "to draw attention to the case." In some cases the hallucinatory voices prompt the patient to commit some deed of violence; he resists for weeks or months, but at last, in a fit of exasperation, his resistance gives way, and he does what he is told. In rare cases, the violence thus instigated may be directed against himself; but, intolerable as the life of the paranoiac is made by his persecution, he very rarely finds refuge in suicide.

The bodily state of the paranoiac offers nothing remarkable. There is no doubt that they do suffer torments from abnormal sensations of various kinds, but we can never discover any justification for these sensations in an altered bodily process.

In its relations to other forms of insanity, paranoia is nearest to obsession. It differs sharply from melancholia in that, although the patient is made miserable by his sufferings, he resents his injuries with rooted indignation. He has none of the conviction of his own unworthiness and incompetence which characterises the despair of the melancholic. Though his delusion is fixed, it differs from the state of fixed delusion in the preponderant influence which the delusion exercises upon conduct.

Paranoia is sometimes a sequel to an attack of acute insanity, but often it is an original malady, arising gradually and becoming gradually intensified for months or years before it is recognised. Usually a

family history of insanity can be traced, but this is far from invariable. It is an incurable and irrecoverable malady. As age advances, the prominence of the delusion subsides, and in rare cases the patient can be trusted to resume his place among his fellow-men, but such cases are very few indeed. The broad general rule is that paranoia is irrecoverable. Curative treatment there is none. When we find syphilis among the antecedents of the disease, the syphilis should be treated, but we must not expect the treatment to affect the insanity.

The need of restraint in an institution is more imperative in paranoia than in any other form of insanity, and the rule is stringent that no paranoiac should be allowed at large. If he is so allowed, his perpetration of a murder is merely a matter of time, and is certain to take place if time be allowed. Scarcely a week, and never a month, passes in which the newspapers do not report a murder committed by a person suffering from this form of insanity and one who obviously ought to have been placed in an asylum years before.

8. Recurrent Insanity.

Insanity, like every other organic process, exhibits periodicity. In every case of insanity that is at all prolonged, a certain rhythm of exacerbation and subsidence can be detected. Epilepsy, and the insanity associated with it, are conspicuous instances of periodicity, more or less regular. In general paralysis, the alternation of periods of excitement and of calm is usually a well-marked feature of the disease. In melancholia, the depression is most intense in the small hours of the morning. In mania, the excitement

is often greatest in the early hours of the night; and more or less of periodicity of the most various length of cycle can be detected in all cases of insanity. There are certain cases in which different forms of insanity follow one another in regular series, which is repeated again and again, and to this variety of insanity the names *folie circulaire*, circular insanity, and *folie à double forme* have been given. It is usually described as a period of depression, or melancholia, followed by a period of excitement approaching, or attaining to, acute mania, from which recovery takes place, to be followed in time by melancholia again, and the cycle is then repeated. The events do not always follow this order, however. Sometimes the excitement precedes the period of depression. Often the period of recovery is not one of complete recovery, but one of mild dementia, and the degree of dementia may be so considerable as to necessitate the permanent detention of the patient in an institution. Then the case becomes one of ordinary dementia, with the periodical outbreaks of excitement which are so common in dementia, and with periods of depression of only slight degree sandwiched between them. In many cases the patient recognises the nature of his malady, and, when he feels it coming on, he voluntarily seeks the protection of an institution, from which he returns when the attack is over to resume the business of life. The most difficult and unhappy cases are those in which the degree of the excitement is just insufficient to allow of the certification of the patient, and he remains at large in a state of sub-acute mania, dissipating his property and bringing scandal upon his name, until the period of depression sets in, to plunge him into agonies of remorse.

There is a variety of circular insanity in which the period of depression is replaced by a period of stupor, usually of the resistive type, and to this variety the name of Katatonia has been given.

The symptoms of recurrent insanity at any given time are the symptoms of the particular form of insanity that the patient then exhibits, and the treatment corresponds. The prognosis is very unhopeful. The interval of lucidity or of sanity does not usually become shorter, but the recovery therein becomes less and less complete, until a definite state of dementia takes its place in the cycle.

The period of the cycle varies much in different cases. In many of the chronic inmates of asylums a periodicity of a few weeks can be recognised in the outbreaks of excitement; but in what would be called *folie circulaire*, the intervals may be equal or unequal, the rule being for the period of tranquillity and comparative mental health to be considerably longer than those of depression and excitement, which are approximately equal, and may be one, two, or three months or more in duration.

9. Insanities of Reproduction.

Insanity of Pregnancy.

It is remarkable that although all women are so liable during pregnancy to emotional disturbances, unprovoked "hysterical" laughing and weeping, "longings," caprices of all kinds, and other mental disturbances, yet disturbance to the point of actual insanity is rare in pregnancy. When it does occur, it occurs either about the third month, as an exaggeration

of the longings and caprices that normally appear then, or about the sixth month, or later, it comes on gradually as the fœtus grows. The latter variety is the more frequent and the more severe, the first variety sometimes recovering in the later months of pregnancy, while the latter never recovers until after delivery.

The form of the insauity of pregnancy is an acute or sub-acute insanity of melancholic type, with suicidal inclination. The delusions are oftened coloured by the condition of the patient, who imagines that she herself or her husband has been unfaithful, or has other delusions in which the husband is concerued, as that she has ruined him.

As already said, when the insanity comes on about the third month after the pregnancy, it may recover before delivery; but when it comes on in the later stages, it never recovers till the child is born. In a minority of cases the birth of the child, whether prematurely or at term, is followed by rapid recovery; in other cases the insanity continues without change; and in yet a third class it undergoes an exacerbation a few days after labour, as if puerperal insanity were added to that of pregnaucy. Hence the rule is not to bring on premature labour in the hope of terminating the insanity by that means, but the rule ought by no means to be slavishly adhered to in all cases. In some cases, and especially when the insanity is very acute and severe, it is justifiable, and is followed by speedy recovery.

The treatment of the insanity of pregnancy is that of acute insanity of melancholic type, but with this difference—that since whatever drugs are given to the woman are given to the child in her womb also, the

administration of drugs is to be cautious, and is to be minimised. As in other varieties of insanity connected with reproduction, the prognosis in not unfavourable. About three-fourths of the cases recover.

Puerperal Insanity.

The puerperium is one of the commonest occasions of insanity in women, occurring in about a quarter per per cent. of all confinements, and being responsible for about seven per cent. of all cases of insanity in women. It is most common in primiparæ and within the first week after labour, it is less common in the second week, and after that time it is rare; but insanity occurring within six weeks of labour is still called puerperal, and partakes of the character of puerperal insanity. Should insanity occur after this period, it is the insanity of lactation.

Puerperal insanity is always an acute insanity, and may be of any of the types of that malady that have been described, or of some intermediate grade between two or more of them, but usually it is maniacal-melancholic in character. In addition to the description that has already beeu given of acute insanity, there are certaiu characters special to the puerperal variety. The impulsive violence so often seen in acute insanity is, in puerperal insanity, usually directed against the infant, which should be immediately removed to a place of safety. Ofteu, but by no means always, there is a septic element in the disease. The lochia become offensive, the uterus is tender, the temperature is raised, the pulse rapid and weak, the lips are dry and the tongue foul. In such cases the uterus must be examined, and, if necessary, cleaned out, and the usual sanitary

precautions taken. In other respects the treatment is that already prescribed for acute iusanity.

The treatment is usually successful, perhaps because the patients are always got under treatment early. It is usually necessary to remove the patient to an institution, and here she commonly recovers. The recovery is often interrupted by relapses, sometimes serious, though usually slight, and for this reason, and because the relapse is likely to be much more serious at home than in an institution, and especially because, even when recovered, the patient ought not for several months to resume marital relations, the stay at the institution ought to be prolonged. The subjects of puerperal insanity often recover with apparent completeness in three months; but they should rarely be allowed to go home before the child is six months old. A rough practical rule is not to discharge the patient until menstruation is re-established, but this will not always work, although the re-establishment of menstruation is often the sign of complete recovery, and a considerable mental improvement occurring at the same time is of excellent augury. But when no improvement accompanies the occurrence of a menstrual period, the prognosis is bad.

Puerperal insanity is remarkable as being the only form of insanity, except acute delirious mania, in which the temperature is raised, except from accidental causes.

Insanity of Lactation.

This is an insanity of starvation, of exhaustion. It occurs mainly in the later months of suckling, and among women who suckle their babies freely and long, work hard, aud are perhaps, in addition, insufficiently

fed; and is rare among the well-to-do. Agreeably to its causation, it is an acute insanity of melancholic type (which see), and is very amenable to treatment. Fully three-fourths of the cases recover.

Insanity of the Climacteric.

This is a sub-acute insanity, often becoming acute, of gradual onset, and always of melancholic type, associated with suspicion and terror, and with attempts at suicide. The patient is very apt to have delusions of suspicion, as distinguished from delusions of persecution. She thinks her food is poisoned, that something dreadful is going to happen, or has happened; that she has lost all her money, and perhaps been robbed of it. Sometimes the delusions have a sexual colouring. An old maid thinks she has been seduced, she has been unchaste, she is engaged to this man or that, to whom perhaps she has never spoken. There is nothing special in the treatment. The prognosis is not unfavourable, but the duration of the disease is likely to be longer than in the insanities connected with child-bearing. In these we expect recovery to take place, if at all, within a year, and often within six months. In the insanity of the climacteric it is unwise to expect recovery under eighteen months or two years.

10. Insanity of Times of Life.

At puberty, in spite of the important revolution that then takes place in the ecouomy, the occurrence of insanity in a previously sane boy or girl is extremely rare. In the few cases that have been observed it has been an acute insanity and very recoverable.

At adolescence—that is to say, from eighteen to twenty-five—insanity is very much more common. The factors which contribute to the occurrence of insanity at this age have already been considered. It is pre-eminently the age at which stupor occurs, but the adolescent insane are far from being all examples of stupor. Where the insanity is not stuporose, it is almost always the maniacal type of acute insanity, usually more associated with exaltation than is this malady in older persons. There is nothing special to record as to treatment, except that in these cases the feeding must be even more superabundant than in older adults.

Senile insanity is a sub-acute, or sometimes an acute insanity, usually of maniacal type, sometimes melancholic, associated with much dementia, with great loss of memory of the kind already described, and very irrecoverable. In few varieties of insanity are restlessness combined with outbreaks of temper so prolonged as in senile insanity. They may continue for many months. The loss of memory for substantives, which is so characteristic of senility, is often, in senile insanity, exaggerated into well-marked aphasia. The outbreaks of peevishness, ill-temper, and futile violence which are so common are sometimes replaced by attacks of panic, in which the patient will scream that he is being murdered, when in fact no one is touching him or is very near him.

11. Insanity from Alcohol.

The various forms of insanity that alcohol may produce, according to the quantity taken and the time over which it has been administered, have already been

enumerated; they are: (1) Drunkenness, which may be of various types—bragging, suspicious, maudlin, or furious—the last being sometimes called delirium ebriosum; (2) Delirium tremens; (3) Alcoholic insanity, ordinarily so termed; and to these may be added (4) the moral aud intellectual degradatiou, short of actual insanity, that is observable in all chronic drunkards. It is with the third form that we are now concerned.

It occurs in men who have habitually for many years drunk too much. During all this time they may never once have been drunk in the ordinary sense of the word, certainly not very drunk, but every day they have takeu a considerable quantity of alcohol, enough to have rendered drunk a person of ordinary susceptibility to the immediate influence of alcohol. This has gone on for years and years—it may be ten, it may be twenty—and latterly they have undergone the moral and intellectual degradation that drunkards undergo. They have become liars, they have become indifferent to the means by which they get their drink, so that they get it. They sponge upon others, they run iuto debt, they frequent low company, they sink in the social scale, they become unfit to associate with ladies and gentlemen, they become a reproach and a byword among their families and friends. On first rising in the morning they retch violently; their eyes become watery and their hands tremulous. When these confirmatory signs of long-continued drunkenness appear, insanity is not far off, and may occur at any time.

The insanity of chronic alcoholism is usually characterised by suspiciou, by delusion, by disorder of memory, and by hallucination and various sensory disturbances and motor defects.

Suspicion is usually a prominent feature in alcoholic insanity. The patient believes that his food is poisoned, that his wife is unfaithful, that his children are conspiring against him, that he is to be tortured and destroyed; and, combined as this attitude of mind is with hallucination, it is apt to be confused with paranoia, which it often closely resembles. It is important to discriminate between the two, for the insanity of alcohol is far more improvable than paranoia, and the prognosis therefore much better, and the treatment is different. The diagnosis is not usually difficult, the defect of memory and the motor disturbance of alcoholic insanity being sufficient, apart from the history, to establish the difference.

The delusions are often those of pure suspicion and persecution, such as have been instanced; but there is often a strain of vainglory and boastfulness running through them in addition. The patient believes himself to be rich, to be a great personage, but at the same time people are conspiring to rob him of his money or his rank. He has not the confident security of the ordinary megalomaniac, the general paralytic, or the man with fixed delusion.

The disorder of memory is usually a prominent feature in alcoholic insanity. There is usually marked defect, and the defect is the same in character as the defect in old age—that is to say, the memory of long-past events is tenacious and faithful, but the current events of daily life are swept out of the memory as soon as they have happened. The patient receives a visit from his wife, who spends an hour with him, and ten minutes after she has gone he has forgotten all about the visit, and vows that she has not been near him. He worries because he has not written a letter,

which he has written and delivered to be posted a dozen times or more. He has very little notion of the lapse of time, and if he does remember a recent event, he cannot tell whether it occurred to-day or yesterday, or a week or a month ago. Together with this defect, there is a peculiar delusion of memory which is not so pronounced or so frequent in any other variety of insanity. The patient remembers vividly and in detail events which have never occurred at all. He will describe visits that he thinks he has paid, will repeat conversations that he believes he has taken part in, scenes that he thinks that he has witnessed, none of which have ever taken place at all. It sometimes happens that the imaginary events which he describes, and fully believes, that he has witnessed are assaults upon himself or others, and he then becomes a dangerous person.

Hallucinations occur more constantly in alcoholic insanity than in any other variety of insanity except paranoia. They are usually aural, sometimes visual, and not infrequently affect the sense of smell or taste. They are always unpleasant and disconcerting, and usually work in with and corroborate the delusions of suspicion. The evil taste or smell that he experiences confirms his opinion of poison in his food. The voices that he hears, the texts that he sees written upon the walls, corroborate the suspicion of persecution to which he is subject.

Of the motor disturbances, which are rarely absent in alcoholic insanity, the chief is tremor, which is usually pronounced. It occurs first and most in the hands, but it subsequently affects the lips and articulatory organs generally. It is present both in rest and during voluntary movement, but is more pronounced

in the latter. Following on tremor of the hands comes a peculiar gait, which is neither a reel nor ataxy, but a kind of stringhalt; and the patient wavers in his walk so that his course is not a straight line but an irregular zig-zag. Cramp in the calf of the leg is often frequent and severe in alcoholic insanity, and occasionally convulsions occur in its course. Slight irregularity of the pupils is not uncommon in alcoholic insanity, as in many other morbid states, and the reactions are apt to be sluggish, but they are never absent.

Alcoholic insanity often simulates paranoia, from which it may be distinguished as already described. Its symptoms are often closely similar to those of general paralysis, and there are cases in which the diagnosis cannot be made, and we have to wait for the course of the case to clear up the difficulty. The history is not to be depended upon, for drunkards very often deny their habit, and general paralytics have often been intemperate. The tremor is closely alike in the two cases. In the early stage of general paralysis it is never so marked as it sometimes is in the early stage of alcoholic insanity; but sometimes in the latter there is little or no tremor. If the peculiar mnemonic delusions of alcoholism are present, their presence is almost decisive, but the delusions of general paralysis often approach them in character. The chief reliance must be placed upon the pupillary reactions. It has been said that these reactions are sometimes lost in alcoholic insanity, but this is not my experience. If either the reaction to light or that to accommodation is lost, or is seriously defective, then I believe that general paralysis may be diagnosed without hesitation. The difficulty is that in the early stage of general

paralysis there is sometimes no such sufficient defect in these reactions as to enable us to make a diagnosis, which must then remain in doubt. The importance of clearing up the matter as soon as possible is very great, for general paralysis is certainly fatal, while alcoholic insanity is very improvable, and is compatible with considerable duration of life.

In the treatment of alcoholic insanity, the first thing to be done is to deprive the patient of his alcohol, and this can only be done by sending him to an institution. It is quite futile to attempt to treat such cases in their own homes, for there they will always find means to obtain their poison. It does not matter what vigilance is exercised, they will endeavour to corrupt their nurses or servants, and they will succeed at last. They are sure to have a secret store bestowed somewhere about the house to which they will get access at times. The only possible chance of completely depriving them is to place them in a lunatic asylum. The first week of their deprivation will be a terrible time for them. They will suffer agonies of depression and misery, will become perhaps riotously maniacal, and will give endless trouble by their false accusations and general perversity. The alcohol need not be absolutely withheld. Sleep is often better obtained if a dose of whiskey in hot milk is given at night; and when the misery becomes very great, the same remedy will give relief. So long as the patient is in the institution, we have him under absolute control, and we need not fear the result of an occasional dose of stimulant. He probably suffers from gastritis, more or less, and this must be treated, especially as it is important in this, as in acute insanity, to feed copiously. Iron and bitter tonics will be found useful, but the chief reliance is to be placed upon

deprivation of alcohol, copious feeding, regular hours, and fresh air. In these circumstances the improvement that takes place is often surprising. The patient in a few months becomes so well that it is very difficult to detain him in an institution; and, yet, if he is discharged, he will certainly return to his drinking habits and relapse.

12. General Paralysis.

There is no variety of insanity more distinct or more important than this. It is so distinct that some years ago a very able writer on insanity divided this malady into two varieties only—ordinary insanity and general paralysis. Its importance lies in its frequency, in its progressive and incurable character, and in the frequent difficulty of its diagnosis.

In the main, general paralysis is a disease of middle life and of the male sex. It seems to affect by preference vigorous, energetic, successful men, who have lived full, active, busy lives in cities; who are married; who have indulged freely in eating and drinking, and in sexuality; and in whom an hereditary disposition to insanity is absent. While this is the character of the majority of persons who become the victims of general paralysis, the malady is not strictly limited to such persons. It does occur also in those who have an insane inheritance, and about 10 per cent. of general paralytics are thus characterised. It does occur also in women, about 19 per cent. of the occurring cases affecting this sex; and in rare cases it occurs in early life, in children in the early teens, and then it is invariably found to be associated with hereditary syphilis. So singular and invariable an association in

these early cases led to strict inquiry with respect to the antecedents of general paralytics of mature age, and it was then found that in a very large proportion of these also syphilis was antecedent to the disease. It was found that in 80 per cent. there was absolute proof of syphilis, either in the history or in stigmata existing in the body. In the remaining 20 per cent. no history or sign of syphilis could be found, but then it is found that with respect to other lesions which are unquestionably syphilitic, but which occur long after the infection, there is a residue of 20 per cent. in which no history of syphilis and no other stigmata of syphilis exist. We are therefore driven to the conclusion that syphilis is a very constant if not an invariable antecedent of general paralysis, and certainly the most important factor in the causation of the disease.

It is certainly not the sole factor, however. Only a very small proportion of the persons who are syphilitic become general paralytics; and in almost all cases of general paralysis we find that the patient has recently passed through a period of mental or other stress, which has seemed to determine the onset of the disease. He has had great anxiety in his business or in his family; he has indulged too freely in alcohol; he has had influenza; he has had a blow on the head; or he has suffered from some other form of stress; and it seems that it is this provocative occasion, acting upon a person already syphilised, that determines the disease. It is to be remembered that general paralysis is closely allied to tabes; that tabes sometimes culminates and terminates in general paralysis; that true tabetic symptoms occur in general paralysis; and that the affections of the oculo-motor apparatus in the two diseases are closely allied. Hence we have additional

reason for expecting that the causes that produce the one will be closely similar to those that produce the other.

General paralysis may begin quite suddenly, with a fit, or with an outbreak of acute insanity of which no warning has been given; but usually, after the disease has declared itself, it is remembered that for days, weeks, or perhaps even months, the patient had been failing in certain assignable ways. It is rare, however, for these warnings to be sufficiently pronounced and sufficiently definite to enable us to predict, or even to suspect, what is coming. When it is not sudden, the onset of the disease is usually rapid.

The prodromata may be divided into four groups, and are, in the order of their frequency, moral, intellectual, sensory, and motor.

The most frequent of the early changes of general paralysis is a change and a degradation of the moral tone of the individual. His character changes. Always a busy, energetic man, prone to take risks, to keep late hours, to live freely, all these characteristics become accentuated. His energy becomes overpowering; he undertakes more than he can get through, and his affairs become more and more involved and entangled; he speculates more rashly; he goes about more; he takes long journeys upon slight inducement; he drinks more; he is less particular about his associates and companions; he goes among loose women; he talks too much, and chatters among strangers about his private affairs; he becomes effusive; he gives presents without sufficient justification; he brags. He is like a man always a little under the influence of drink; and, as he does drink a good deal, his peculiarities are attributed to drink alone. When this phase of conduct

is but slightly marked, it may be considered as a prodroma of the disease, but when it is exaggerated, it constitutes the first stage of the malady in one of its forms.

The prodromata on the intellectual side, in addition to those included in the above description, consist of a want of mental efficiency, more or less marked, and existing for a longer or shorter time before the outbreak of the disease. The patient becomes stupid. He cannot concentrate his attention; he forgets things; he makes mistakes; he is confused in his mind, and it is apparent that he is less capable in business and less able to transact all the affairs of life than he was. When these symptoms are but slight, they are looked on as prodromata. When pronounced, they constitute the demented form of the disease.

Neither the pupillary abnormalities nor the articulatory troubles, however slight in degree, are counted among the prodromata of general paralysis. If they exist at all, we regard the disease as established; but then the pupillary changes are not seen until they are looked for, and they are not looked for until some more prominent symptom suggests general paralysis. The articulatory defect, again, is never a very early symptom. Often the patient has been consigned to an asylum for months before the defect of articulation shows itself, and it never appears before the mental symptoms. But before the definite outbreak of the disease there may be transient motor troubles. A limb may become weak, or an eyelid may droop, or there may be transient aphasia or transient strabismus, which, with a history of syphilis, may give rise to a suspicion of gumma. The handwriting sometimes becomes sprawling or shaky, but it does not, in this early stage, show the

characteristic changes that will be presently described. In those cases in which the morbid change first attacks the cord, ataxy of the gait may properly be looked upon as a prodroma of general paralysis; but until the insanity declares itself, there is nothing to distinguish such cases from ordinary tabes. In rare cases there may, in the early stage, be a transient ataxy of gait, comparable with the transient aphasia; or there may be attacks of giddiness, faintings, or purposeless vomiting. It will be seen from this description that although, when the disease declares itself, we can recognise that such motor symptoms as these were its earliest manifestations, yet, until the malady is otherwise recognisable, there is nothing in them to point to an oncoming general paralysis, or to lead us to anticipate its occurrence.

On the sensory side, the warnings, if warnings they can be called, are similarly transient, similarly isolated, and usually similarly sudden. When a patient is brought to us with definite general paralysis, we may learn that during the previous twelve or eighteen months he has been treated for a sudden deafness of one ear, or blindness of one eye, or for neuralgia, or severe headache, or for local numbness or anæsthesia; but it is not possible, at the time these symptoms occur, to predict that they will be followed by general paralysis.

The onset of the disease may be sudden, and is usually rapid. Often it is possible to assign the very day upon which the malady declared itself, either by a fit of some kind, or by an outbreak of acute mania. Often the symptoms, which have been described as moral or intellectual prodromata, become rapidly exaggerated in intensity until, in the course of a week

or so, the apprehension that the patient may be going out of his mind becomes a fact only too patent. In any case, the definite invasion of the disease is usually an attack of acute insanity, and in the majority of cases the acute insanity is of the maniacal type. In a minority of cases the acute insanity of the onset is melancholic or resistive. It is scarcely ever suicidal. It is usually very acute, and marked by aggression and violence. Sometimes it is so acute as to be taken for acute delirious mania. It lasts for a few days, or more often for several weeks, and then subsides into a sub-acute insanity which exhibits one of the following types:—

1. The maniacal or classical type.
2. The melancholic type.
3. The demented type.
4. The fulminating type.
5. The circular type.
6. The spinal or tabetic type.

1. The maniacal or classical type of general paralysis is the most distinctive and most striking of all forms of insanity. In no other form do we witness such exaggerated hyperbolical exaltation. The patient owns millions and millions; he is thousands of years old; he has hundreds of wives, thousands of children; he has such titles as were never heard of; he is the greatest inventor, artist, poet, warrior, statesman, pitch-and-toss player, the world has ever seen. He is lavishly benevolent; he will give cheques for millions, written on dirty bits of newspaper, to all bystanders. He talks incessantly, save when he is writing; and he writes incessantly, save when he is talking. He corresponds, still on margins of newspapers, or dirty scraps picked

up in the road, with all the crowned heads of Europe and all the celebrated people he can think of. His writing is characteristic. It is sprawling and shaky; it is unrecognisable as his ordinary handwriting. He omits letters; he fails to finish his words; he omits syllables, and often whole words. He runs the words together in writing just as he does in speech, and often he repeats the same word twice or oftener.

In this stage he sleeps little, he is up early and late, he is full of eager, busy, futile activity. In whatever is going on he must take part, and principal part. If anything is being discussed, he lays down the law; if anything is being done, he takes the command. He appropriates everything he has a mind to, and when his pockets are turned out, they are found to contain as miscellaneous a collection as a magpie's nest —other people's pipes, handkerchiefs, and pencils, one or two playing-cards, bits of string, bits of bread, sticks, stones, dead leaves, and bits of paper innumerable.

At the same time, with all his grandeur and majesty, he is singularly weak of will and easily influenced. In his own house he is obedient to his own servants, if they are at once authoritative and judicious. He does what he is told. He is full of preposterous schemes, but he is diverted from their pursuit with the utmost ease; and even if left alone, he does not pursue any one of them for more than a few moments together. He is subject to outbursts of temper, rising often to fury, but they are shortlived and easy to control. Sent to an asylum, he accepts the situation without murmur and without question. He does not resent his removal from home; he sees nothing worthy of protest or remark in the control to which he is subjected.

In this excited and grandiose condition he remains for a few months, becoming gradually calmer and more demented, until at the end of a variable time, usually about a year after the onset of the disease, he has a fit, and then the course of the disease follows the order that will be presently described.

2. The demented type. In common with other insane persons, all general paralytics are demented in every stage of their malady; but what is meant by the demented type of general paralysis is a form of the disease in which the dementia is simple, and is unaccompanied by the active symptoms so characteristic of the other forms. In the second stage of the disease—that is to say, after the first fit—the more active symptoms subside in every type of the disease, and the case approaches to one of simple dementia; but in the type now under consideration the symptoms are never very active. The patient is from the first heavy, stupid, lethargic, inactive; whatever activity there is in the mind is of the same cast as in the classical type, and the patient often surprises us by evincing out of his dulness some extravagant delusion; and just as in the other types, the period of simple dementia sets in with the fits, so in this type fits occur early in the course of the malady and are frequent during its progress. This is the form that general paralysis usually takes when it begins with a fit. As might be expected, the course of the disease is more rapid than in the classical type.

3. The melancholic type. General paralysis usually begins with an attack of acute insanity, and, as already stated, the acute insanity of the commencement is sometimes melancholic or resistive in type. When this

is so, the tinge of melancholia usually remains throughout the progress of the disease. Not infrequently a case that has begun with acute mania becomes subsequently melancholic. The patient then presents the physical signs of general paralysis together with the ordinary mental symptoms of melancholia. But the melancholic symptoms are not quite ordinary; they are often combined with an element of grandiosity in excess of what is seen in ordinary melancholia. The ordinary melancholic believes that his bowels are obstructed, and that he has had no motion for a month; the melancholy general paralytic has had no motion for thirty years. The ordinary melancholic has a ton weight resting on his body; the melancholy general paralytic is crushed under the weight of the whole earth. The melancholia of general paralysis may be ordinary delusional melancholia or may be of the resistive type. It may be associated with stupor, and it may be attended with suicidal attempts, though these latter are not common in general paralysis. In the melancholic form there are not the remissions and periods of improvements that take place in the classical form, or if they occur, they are much less marked.

4. General paralysis of fulminating type is a terrible malady. Whereas the other types of the disease begin with acute insanity, this type begins with the acutest form of insanity—acute delirious mania. Whereas the other types pass through the various stages in the course of two or three years ere they terminate in death from exhaustion, the fulminating cases run their course in six months, in four or three months, or even less. The symptoms are those of the classical form, but they are much more acute, and the course of the disease is very much more rapid.

5. The circular type of general paralysis is rare. It begins in the ordinary way with an outbreak of sub-acute, culminating in acute, insanity, with the exaltation, braggadocio, extravagance, and immorality of the classical form. After a few months, the acute symptoms subside, as they usually do in the classical form; but instead of the relapse that takes place in the other types of general paralysis, the patient continues to improve until he is practically well, and it is thought that the diagnosis was wrong, and that the case was not one of general paralysis at all. After a few months of sanity, the patient begins to be depressed, and gradually sinks into profound melancholia, for which he is again sent to an asylum, and from which he again recovers and returns to active life. Then, after an interval, occurs a new outbreak of acute mania, and the circle is complete. The circle may be renewed more than once before the physical signs exhibit themselves, and the case then follows the usual course of the classical type of general paralysis.

6. The spinal type. General paralysis always involves the spinal cord sooner or later; spinal paralyses are present during life, and spinal cord degeneration is found after death. In the ordinary types, the brain is affected first and most; and symptoms due to disease of the spinal cord appear late in the course of the disease, when the patient is already a wreck, and consequently do not attract much attention. But there are cases in which the spinal cord is first attacked, and the malady begins as tabes or as spastic paraplegia, upon which the mental and other symptoms of general paralysis are subsequently grafted.

In addition to the six forms described, general

paralysis exhibits certain peculiarities when it occurs in women and in the young.

The disease is less frequent in women than in men, in the proportion of less than one to five. The symptoms in women are less aggravated, less pronounced. All the manifestations are milder. The type is usually the demented, but unlike the demented type in men, the course of the malady is prolonged. It is more " chronic " in character than it is in men. It usually sets in earlier iu life—nearer thirty than forty, —and the physical symptoms are less pronounced. The tremor, the articulatory defect, the involvement of pupils, appear later and are less pronounced, and fits are less frequent.

In children also, the symptoms and the course of the disease are sub-acute, and the general character of the malady is similar to that in women. It is always associated with hereditary syphilis.

Physical signs.—These are of extreme importance, for until they are recognised the diagnosis cannot be made. The earliest are the pupillary changes. Next come defects in articulation; then the manual movements, and especially the handwriting, are affected; and lastly the gait deteriorates. This is the usual course, but, as already noted, there are cases in which tabetic symptoms precede the mental changes by months or even years.

The pupils are usually unequal, and ofteu deviate from circularity and become oval or irregular in outline, and they fail to react to light, or in accommodation, or both. In ninety-nine cases out of a hundred, when unresponsive pupils co-exist with any form of mental disorder, the case is one of general paralysis. As far as my experience goes, the pupillary symptoms

are not only the earliest of the physical signs, but they are never absent in commencing general paralysis. Hence their extreme importance.

The articulatory defect comes later, and is highly characteristic. It is exactly the same as that of a drunken man. The speech is "thick." The words are clipped and run together. The patient often speaks with extreme deliberation, so as to overcome the defect, of which he is conscious; but if he speaks at all quickly, the words are blurred and fused together, and syllables are omitted. The labials and dentals are first affected; and when the disease is further advanced, the voice itself becomes involved and assumes a very characteristic peculiarity. It becomes monotonous. Cadence is lost; and in addition there is often a peculiar bleat, which can always be recognised after it has once been heard.

The face is remarkably expressionless. It looks puffy, and the normal lines and folds fill up and disappear. The cheeks and *alæ nasi* are often slimy with grease, and when the patient speaks, there is tremor, not only of the lips and of the tongue, but of the muscles of the cheeks as well.

The peculiarities of the handwriting have already been described. Other movements of the hands are often defective. The patient has difficulty with his buttons, and cannot pick up a pin from a smooth surface.

The gait does not become defective until the later stages of the disease, and then the defect is not very definite. It is not ataxic; it is not a reel; it is a general inefficiency which is scarcely describable otherwise. The patient walks slowly, turns with difficulty, and is apt to fall; but there is no localised or

differential paralysis. It is a generally diffused weakness and incompetency.

The knee-jerks are usually exaggerated in the early stage of the malady. Subsequently they may disappear and reappear, and may be different in the two sides.

Stages and Fits.—General paralysis is a progressive disease, and it is usually described as marked off into three stages, the first extending from the outbreak of the disease until the first fit; the second from the first fit till the patient becomes bedridden; and the third the bedridden stage. It is not always possible to mark these distinctions, nor are they very important. But the occurrence of the fits is a very important incident in the progress of the malady.

As already stated, the disease may begin with a fit; and whether it does so or no, fits, or sudden exacerbations allied to fits, invariably occur in the course of the disease, usually beginning about midway in its duration. In different cases the fits are very different in character, but in the same case the fits usually are closely alike. In the classical type of the disease, the fit is a universal convulsion, indistinguishable from those of epilepsy. It begins less suddenly, it is true, than epileptic paroxysms usually begin, but in other features it is the same. The head and eyes deviate to one side, the spasm becomes universal, may be accompanied by evacuation of the bowels and bladder, and is followed by a period of coma. Fits of this kind may succeed one another rapidly, so that the patient passes into the *status epilepticus*, which is far more common in general paralysis than in idiopathic epilepsy; and in this condition a certain proportion of general paralytics die.

Very commonly the fit is not of this definite

character. Often it is "apoplectiform," but, in this case again, it rarely has the very rapid onset of hæmorrhagic apoplexy. The patient becomes duller and duller, more and more stupid, until in the course of an hour, or two or three hours, he is comatose. The coma is not usually deep—rarely so deep as to be stertorous—and often it is found to be combined with rigid deviation of head and eyes to one side, so that it partakes of the nature of epilepsy.

In very many cases, the character of the fit is less definite than this. There is no convulsion, nor is there actual coma, but the patient becomes for a few hours unusually dull, lethargic, and stupid. He lies about; he does not answer, or he answers slowly and at random; he cannot be got to take his food; he seems dazed; he is muscularly weak and incapable of exertion; and when this condition passes off, he is found to have undergone the deterioration which, as will be presently noticed, invariably follows the fits of general paralysis. These attacks are sometimes called "congestive"—it is hard to say why.

At the stage of the disease at which fits are customary, there sometimes occur causeless attacks of bilious vomiting, or of profuse diarrhœa, which are sometimes followed by fits, and sometimes seem to take the place of fits, or to be a variety of them. In yet other cases, the fit is replaced by a local paralysis, or by a general loss of power, which, by its sudden or rapid onset and its gradual recovery, exhibits its community of nature with the more easily recognised fit.

It is sometimes said that fits do not occur in all cases of general paralysis, and if by a fit is meant an epileptoid or apoplectiform seizure, this is true; but

I have never seen a case of general paralysis in which periodical crises of some kind have not occurred; and if we include, as I think we should, all periodical crises of every kind under the term "fit," then I think there is no case of general paralysis in which fits do not occur.

Whatever the nature of the crisis or fit, it has a very marked effect upon the condition of the patient. When he emerges from it, he is found to be greatly deteriorated. His delusions are, perhaps, less prominent, but this is because he is too stupid to entertain them. He is much weaker in body, and he is much more demented in mind. As the days and weeks pass by, he gradually improves. He climbs the hill again; he recovers a great part of his mental and bodily aptitude, but invariably, before he has completely regained the ground that he lost by the fit, he has another fit; and when he emerges from this, he is found to be on a lower level of capacity, both bodily and mental, than he was after the previous fit. Again he climbs the hill. Again, after the lapse of weeks, or it may even be months, he regains a great deal of his lost ground, but he never regains it all. Invariably, before he has attained to the condition that he reached after the first fit, a third occurs, which reduces him to a still lower depth, and so the malady progresses, each fit leaving behind it a greater wreck, from which recovery is less complete.

This effect of the fits upon the course of the disease is an instance of the periodicity which is discernible more or less distinctly in the course of every case of general paralysis. General paralysis has been called progressive paralysis, but its course is never continuously progressive. While its general course is steadily down-

ward if sufficient intervals are taken, yet, when minutely examined, it is found that this downward progress is not continuous, but is always remittent, a rapid or sudden decline being followed by gradual improvement, and this alternation being continued throughout the disease. This character is discernible from the very first. The outbreak of the malady is, as we have seen, sudden or very rapid, and is followed by a gradual recovery, which may be so complete that the patient is able to return to his business, and to resume his place in the world for several months; and this is called a complete remission. But when careful observation is made, it is found that the remission is not complete, but that it conforms to the rule by which the recovery from every crisis culminates in a state, which is never so near a return to the normal as the pre-critical state. In these "complete remissions" it is found that the character of the patient is a good deal deteriorated, and that his intelligence is less keen. He goes back to his work and his family, it is true, but he can no longer do his work capably, and his family remarks a decided change in his disposition. Thus the circular type of general paralysis is no departure from the type of the malady, but merely an exaggeration of a feature which all cases present in some degee.

With each recurrence of the crisis, the patient becomes more and more demented, and more and more paralytic. At length he becomes incapable even of sitting up, and is confined entirely to bed; and at the same time the lapses of the control of his bladder and bowels, which have been occasional since the crises began, now become habitual. The patient ceases to have the character of an intelligent being. He lies in bed

in the extreme stage of dementia, his arms crossed, his legs drawn up, all his limbs gradually becoming more and more rigidly contracted. He passes his urine and motions under him. He is incapable of conveying food to his mouth or of brushing away the flies that crawl over his face and into his open mouth. It is with the greatest difficulty that he is saved from getting bed-sores, and at length he dies, either in a fit, or in coma, or from diarrhœa, or pneumonia, or some other disease of exhaustion. This bedridden condition is called the third stage of the disease.

The general bodily condition presents characteristic peculiarities in the three stages of the disease. In the first, the maniacal stage, the patiently is usually remarkably "fit." He is in fine "condition." He is muscularly strong, and he is wanting in superfluous fat. His condition is much as if he had been well trained for some athletic contest. In the second stage, as he becomes stupid he gets fat. The lines on his face fill out and are obliterated, and his face becomes more greasy, pulpy-looking, and expressionless. In the last stage, he emaciates, and the emaciation is often extreme.

A very remarkable and very unfortunate nutritive anomaly, that may take place at any time after the first stage of general paralysis, is a change in the structure of the bones, by which they become unusually, and in some cases surprisingly, brittle. This change is so great in some cases that a rib can be easily broken with a thumb and finger, and as general paralytics become very helpless, and often at the same time very restless and apt to fall about, the brittleness of the bones becomes a source of great danger. A certain number of general paralytics die every year

from pneumonia following fractured ribs, or from shock and exhaustion following fracture of other bones.

Diagnosis.—When once the physical signs are decided, there is no difficulty whatever in diagnosing general paralysis. The defect of articulation is pathognomonic, and the pupillary signs, when conjoined with mental disorder of any kind, are equally so. But before the physical signs are established, the difficulty of deciding whether a case is or is not one of general paralysis may be very great—may, indeed, be insuperable. Cases not seldom occur in which a diagnosis is for the time impossible, and we must wait the further development of the disease before giving an opinion.

Generally, any rapid or sudden outbreak of insanity, of any form, in a middle-aged man, in whose family there is no history of insanity, should put us on our guard, and lead us to suspect general paralysis. Even a definite family history of insanity does not exclude general paralysis, but it is much more frequent in men with a sound family constitution. General paralysis sometimes begins with a fit, and the fits are very varied in character; hence, any cerebral crisis, for which no adequate cause can be found, should raise a suspicion of general paralysis when it occurs in middle age.

Acute mania with grandiose delusions and the scattering of cheques for millions, even when occurring in a man of middle age and a fast liver, does not always mean general paralysis. It may be simple acute insanity and may recover. But if any of the physical signs of general paralysis are present, the diagnosis is no longer in doubt.

Dr. Savage lays stress upon the gain of weight in the melancholy type of general paralysis, as against the loss of weight or the continued meagreness of the

ordinary melancholic. This gain of weight is a very important sign if the pupillary and articulatory defects are absent, but usually, by the time the patient has entered upon the fattening stage, these motor defects are already conspicuous.

The greatest difficulty in the diaguosis of general paralysis is in deciding, in a doubtful case with a history of alcoholic excess, whether the disease is general paralysis or alcoholic insanity. The difficulty is the greater, since general paralytics often take to drink in the early stage of the malady, and often have habitually indulged too freely; and it is the greater since alcohol itself produces motor disorder allied to that of general paralysis. The main reliance must be placed on the pupillary changes. These are not present in alcoholic insanity, but they may be absent also in the early stage of general paralysis. The history of morning vomiting is important. There are only two conditions with which regular morning vomiting is associated—pregnancy and alcoholism. But we must be careful to ascertain that the vomiting is regular, and is not a sporadic crisis. The general paralytic sleeps well, though his sleep is short; the alcoholic patient sleeps badly, and is apt to suffer from terrifying dreams. The memory does not present in general paralysis the characteristic defect in recent matters that is so conspicuous in alcholism. The defect of gait and the tremor of hands in the two maladies may be closely alike, and in alcoholism the articulation may be defective, but the defect is not of the same character.

Prognosis.—General paralysis is always fatal, and usually is rapidly incapacitating. Cases are not very uncommon, however, in which, after the acute attack

of insanity which marks the onset of the disease, the patient recovers sufficiently to return to his family and his business for three, six, or twelve months, or even longer. Sooner or later, however, the malady recurs, and although it always runs a remittent course, it is very rare for a second remission to be so complete as to allow of a return home. The average course of the disease is about three years, but it is often less than this, and occasionally it is prolonged for four or five years. The circular type is that of longest duration.

Treatment.—There is at present no curative treatment of general paralysis. Seeing how intimately it is associated with syphilis, it is natural that anti-syphilitic remedies should have been extensively tried, but they have never been found of the least use. Removal to an institution is always necessary. In no class of cases do we witness outbreaks of such frantic violence as in general paralysis, and, as they take place without any warning, and in cases that have previously been quiet and tractable, it is essential that the patient should be in a place where a sufficient staff is available at a moment's notice to deal with him in his outbreak. For the rest, treatment must be of symptoms, and it is important to remember that general paralytics are very amenable to the action of drugs, and that their allowance of tobacco should be very limited, for it is very apt to prostrate them. Sulphonal is the best calmative of excitement, and paraldehyde the best hypnotic; but the former easily produces a great effect upon the gait by its paretic effect on the muscles. Trephining has been tried, to diminish an imaginary intra-cranial pressure, but without any beneficial effect; and the same may be said of paracentesis of the spinal canal. Blistering of the scalp and setons have been

tried, but no would-be curative treatment is of any avail. In the second stage of the disease the patient becomes extremely voracious, and is apt to choke himself if allowed to feed himself. His food must be cut up, and no implement larger than a teaspoon allowed, and if necessary he must be fed. The brittleness of the bones is a source of great anxiety; and every care must be taken to preveut the patient falling about, or getting into quarrels with other patients. In the final stage, the prevention of bedsores must be managed *secundem artem*, and the *status epilepticus* treated in the usual way with rectal injections of chloral.

The *Pathological Anatomy* of general paralysis is very characteristic. There is, it is true, no single change which may not be found in other maladies, but there is no other malady iu which the same combination of changes is found.

The skull is usually thick and heavy; the dura mater, too, is usually thickened and adherent to the skull. Sometimes a meningeal hæmorrhage, or the remains of such a hæmorrhage, in the shape of cyst or membrane, is found between the dura and the arachnoid. The brain is manifestly shrunken, and in consequence the sub-dural and sub-arachnoid fluid is copious, so that the arachnoid and pia have a thickened, semi-opaque, jelly-like appearance. When the membrane is stripped off, it is found to be strongly adherent along the summits of the convolutions of the frontal lobe, so that in these positions a portion of the brain substance is torn off along with the membrane, and a streak is left in the middle of the gyrus, in which the brain appears as if it had been nibbled by a mouse.

The brain is shrunken in all its dimensions; the gyri are thin and the sulci wide, this change being most conspicuous in the frontal lobe, and diminishing backwards. The ventricles are large, and the basal ganglia small, and foci of softening are common in various parts of the brain. Histologically, the nerve elements are diminished and the connective tissue is increased, but, as is evident from the general atrophy, the former process is greatly in excess of the latter. Both cells and nerve fibres suffer, and suffer together, and the morbid change has the characters, in as far as they are distinct, of primary rather than of secondary degeneration. The cells lose the definition of their outline, and not only of their external contour, but of their internal organisation also. The Nissl bodies break up (chromatolysis), the nucleus becomes indistinct, its outline is lost, and at length it disappears. The cell loses its shape, and approaches more and more to the shape of a sphere, by an apparent retraction of the substance that is prolonged into the fibres, and by the bulging of the contour between the origin of the fibres. At first increased in size, in later stages it shrinks, breaks up and disappears, leaving a pigmented detritus which is subsequently absorbed. The processes partake in the destruction of the cells. As the cell-body alters in form, the processes, from being manifest prolongations of the substance of the cell, appear as if stuck into it, or to project from it like the root of a turnip. The finer ramifications disappear, the main processes shrink, dwindle, break up first into lengths and then into granules, which are absorbed and disappear. The same process affects the association and other fibres.

The connective tissue element in the brain shows great relative increase, owing to the disappearance of

so much of the nerve tissue proper. Whether it is upon the whole increased in bulk is doubtful, but certain of its constituents are undoubtedly larger, more prominent, and relatively, if not absolutely, more numerous. The glia takes the stain more deeply than in the normal brain, and as the cells are smaller and wider apart, from the absorption of so many, it constitutes, in any one section, a much larger proportion of the field. The glia cells appear to be more numerous, they are more deeply stained, they are larger, and their visible processes are more numerous and more pronounced. Where the nerve cells are most affected, the spider cells are very numerous, and exhibit a large and well-marked process passing to the wall of the nearest vessel, where it ends in a plate of nucleated protoplasm. A number of other processes surround and envelop the degenerating nerve cell. As the nerve cell disappears, the body of the spider cell shrinks, and what remains of it at last is a network of fibrils.

The blood vessels are numerous, large, tortuous, and dilated at intervals along their course. Their coats are thickened, the endothelial nuclei are increased in number, and around the vessel are groups of extravasated leucocytes mingled with hæmatoidin crystals. The wall of the vessel exhibits hyaline or fatty change, the perivascular lymph spaces are large, and contain masses of lymph-corpuscles here and there.

In the pia-arachnoid the vessels are unusually numerous and prominent, and the whole of the connective tissue apparently increased in amount, and permeated throughout with exudation and with nuclei.

In a large proportion of cases changes are found in the spinal cord similar to those in the brain. The

theca is similarly thickened and adherent, with evidence of blood extravasation within it, and occasionally grey degeneration of the columns is discernible by the naked eye. Microscopically, the changes are the same as are found in the brain, and are most marked in the posterior columns, less in the lateral, and least in the anterior.

13. Insanity of Epilepsy.

Insanity is associated with epilepsy in many ways. We have seen that idiocy is often associated with epilepsy, and is often said to be due to it when the epilepsy begins in very early life. But we have no warrant for concluding that the idiocy is the result of the epilepsy, which is itself but a symptom of some grave irregularity in the mode of working of the nerve elements. It is more likely that the same defect in the constitution of the nervous system, which displays itself in idiocy, has in epilepsy another of its manifestations. And similarly, when it is said that long-continued epilepsy at length brings about insanity, we are arguing *post hoc, ergo propter hoc*, without sufficient warrant. Long-repeated epilepsy indicates a long-continued morbid condition of nerve tissue, and increasing frequency of fits indicates increase of this morbid condition, whatever it may be; and the insanity that at length occurs may well be due to the same advance of this morbid change that underlies the progress of the epilepsy. So that, closely as epilepsy and insanity are often associated, it is no more justifiable to regard the epilepsy as the cause of the insanity, than to regard the insanity as the cause of the epilepsy in those numerous cases in which epileptic convulsions occur in

the final stage of insanity. All that we are justified in saying is that insanity and epilepsy are very closely associated.

Epileptics may be permanently insane, or their insanity may occur only in connection with their fits. The permanently insane epileptics are those whose epilepsy has begun in early life, and who have never been mentally sound, or those who, after life-long epilepsy, have become demented. In the former, the epileptic idiots and imbeciles, the depth or severity of the imbecility or idiocy bears a general relation, not so much to the severity of the fits, as to their frequency; and not so much to the frequency of the fits, as to the earliness in life at which they began. The earlier the epilepsy begins, and the more frequent the fits, the deeper the idiocy. Epilepsy (by which we now mean, not only the periodic convulsions, but the tissue change which underlies it) which does not make its appearance until puberty or later in life, does not, of course, affect the mental development until it appears, and the later it appears, the more complete the development of brain and mind before they begin to be interfered with.

The epileptic idiot is not different from other idiots in any important respect except the fits, but the epileptic imbecile differs much from other imbeciles. He is usually more robust in body. He is taller, bigger, more muscular, more energetic than other imbeciles; he is often more intelligent, and he is usually more industrious. Like most other imbeciles, he is heavy, clumsy, slow, and awkward in his movements; and withal he is irritable, passionate, and quarrelsome. Epileptics are a turbulent, excitable race, prone to quarrelling and violence.

The epileptic dement is usually very demented. His forehead and nose are often scarred from the results of his falls, his aspect is heavy and dull, his movements are slow, clumsy, and inffectual. Like other epileptics, he is liable to outbreaks of impulsive violence.

Other forms of chronic insanity—fixed delusion, persecutory delusion, mania, melancholia—are not often seen in epileptics as a permanent condition in the intervals of the paroxysms. The form of the insanity is simple defect or deprivation.

In connection with the fits, insanity may declare itself before the paroxysm or after it—pre-paroxysmal or post-paroxysmal insanity. It has been described also as replacing the fit, as an outbreak of rage or acute mania taking place at the time the fit is due, and unaccompanied by any fit. It is probable that this outbreak is usually either pre-paroxysmal or post-paroxysmal, the fit having been slight and unnoticed; but it seems as if a periodical outbreak does sometimes occur, at a time and of a character that is regarded as pre-paroxysmal, an outbreak which rises to a climax and passes away without the actual occurrence of a fit.

Pre-paroxysmal Insanity.—Epileptic fits often occur with electric suddenness, and with no preceding or premonitory symptoms to warn us of what is about to happen; but usually there is a warning, and the warnings are of two kinds. The first kind of warning is the aura, which is a part of the fit itself, and which need not be described here, as it is fully dealt with in works on general medicine. It lasts but a few moments, and is soon superseded by, and lost in, the other occurrences of the fit. The second kind of warning is of much longer duration. It consists of

a general alteration of disposition, always in the same sense in the same case, which enables those who are familiar with the patient to fortell the advent of a fit for several hours, and often for several days, before its onset. He becomes more and more irritable, captious, ill-tempered, and apt to violence; or he becomes sullen, morose, silent, and very dangerous, breaking out into frantic rage if interfered with; or he gets more and more stupid, heavy, dull, and lethargic, until he may sit motionless for the greater part of the day, and be scarcely rousable to take his meals; or he is gay, excitable, talkative, and buoyant. But whatever the condition, it is one foreign to his usual and normal state, and it gradually becomes more and more pronounced up to the time when the fit occurs. Or, as has already beeu noted, it may culminate without any observable fit, in some outbreak of violence which is characterised by suddenness, and especially by extreme, savage, reckless ferocity. Every few months the country is startled by some crime of horrible violence, in which the victim is not merely killed, but the attack is pursued and continued after life is extinct, until the body is mutilated almost out of the semblance of humanity. The head is smashed and battered into a pulp, or the body and limbs are hacked and hewed with blind and revolting fury. When the matter is iuvestigated, it is found that either there was no provocation at all, or that what provocatiou was given was utterly and grotesquely out of proportion to the terrible vengeance inflicted. Then, upon still further investigation, it is found either that the criminal is a confirmed epileptic, or more commonly that he has "suffered with his head"; that he has been "very strange in his manner at times"; that

other members of his family have been epileptic; that he has been subject to fainting fits; that he has done odd and unaccountable things; and, in short, that he has given evidence by which we can conclude that he has suffered from epilepsy, and that the crime that he has committed was done towards the end of the pre-paroxysmal stage of epilepsy. In such cases there is not usually any actual fit. The maniacal violence seems to take the place of the fit and to bring the occurrence under the description of *epilepsie larvée* of French writers.

Post-paroxysmal Insanity.—When the alteration of conduct and demeanour of the pre-paroxysmal stage is prolonged and is well marked; when there is a prolonged warning that a fit is coming on; when the modification of character gradually and continuously increases up to the time of the fit; then, when the fit does occur, it entirely clears all such symptoms away, and the patient emerges from it in his normal condition—a condition which may not be one of wholly sound mind, but which is normal to him. The time immediately after the paroxysm is the time at which he is at his best. His intellect is then clearest, his temper least objectionable, his conduct most orderly. Moreover, in the pre-paroxysmal state, in which he is in some degree alienated, he is yet as fully conscious as he is at other times. Post-paroxysmal insanity is the reverse of all this. The patient as a rule preserves his usual conduct and demeauour up to the very moment of the fit. There is usually no warning at all in the strict sense, though there may be an aura. The fit is often very slight—indeed, elaborate automatism is not common after severe fits. After a fit, which may be iudicated merely by a momentary pallor, or

an instant of deviation of the eyes and head, or a slight sinking at the knees, or some similarly trivial manifestation, the patient enters upon a period of action, which is distinguished by certain striking peculiarities. In the first place, of whatever acts he then does, he retains not the slightest trace of recollection afterwards; and hence it is assumed that when he does them he is wholly unconscious, an hypothesis which gains corroboration from the nature of the act. This is usually an habitual act. It is something which the patient is in the habit of doing, and which he can do with a minimum of deliberation and attention; or, rather, it is the caricature of some such habitual act—a caricature which is often nullified or vitiated by want of appreciation of the circumstances under which it is done. For instance, one of the most frequent of these automatic acts is that of undressing; and the patient will start to undress himself wherever he may happen to be—in the street, in a railway train, at a dinner-party, anywhere. Or he will make water, but instead of proceeding to a urinal, he will micturate in a corner of the room or out of the window, or he will use his hat or his beer-jug for a chamber-pot. Or he will wind up his watch, but will stick the key in anywhere it will go, or will use for a key any small object that comes to his hand, or he will go on winding until he breaks the works. Usually, whatever act a patient does after one fit, that same act he will repeat after every fit, but this is subject to a very important modification—viz., that if he find any implement in his hand or handy, he will be very apt to put that implement to its common use, or to some caricature of its common use. If he happen to be holding a pen, he will make marks on the surface before him. If he happen to

be holding a gun or pistol, he may load and fire it. If he happen to be holding a knife, he may cut something with it. Thus it happened that a woman was cutting bread and butter for her children's tea when she had a fit, and in the subsequent automatism she cut the arm of one of her children, so that it died; and in a similar way other quasi-crimes have been committed. Usually the period of automatism after the fit lasts for a few minutes only, but in instances not very rare it is prolonged for hours; and there are cases in which, after a fit, the patient lives, as it were, a new life, lasting for days, weeks, and even months. It is quite a usual occurrence for a patient in post-epileptic automatism to show some appreciation of surrounding circumstances. I have seen one in this condition walk for several hundred yards, getting over a stile and a gate, and deviating from his course when shouted at. But there are cases, recorded upon unimpeachable authority, in which the patient has taken a ticket, has travelled a long distance, put up at hotels, bought, sold, and transacted other business; and at length, after days or weeks, has woke up to a recollection of all his former life up to the moment of the fit, after which his mind was an utter blank as to every experience that he had undergone. The case then merges into one of double or alternate consciousness.

In treatment, epileptic insanity requires nothing in addition to the treatment of epilepsy and of insanity. For the first, the main reliance is upon diminution or abolition of meat in the diet, and the prolonged administration of as large doses of bromides as the patient is able to endure. In the dangerous outbreaks, the administration of hyoscin will be found

very effectual, and the *status epilepticus* demands treatment *secundem artem* by rectal injection of chloral hydrate.

14. Insanity of Bodily Disease.

There are several bodily diseases which are connected with insanity in the sense that those who suffer from them are liable to insanity, which usually exhibits much the same form in different cases of the same bodily disease. There are other bodily diseases which are connected with insanity in the sense that the insane are peculiarly liable to them.

All exhausting diseases of whatever kind imply some degree of dementia, to the extent that the patient becomes incapable of strennons intellectnal labonr; frequently becomes irritable and fractious; frequently becomes weak of will, unable to stand out against persuasion, and "facile," as the Scotch law calls it. Cardiac disease, bronchitis, and other affections in which the blood snpplying the brain is imperfectly aerated, are often attended with delirinm. Heart disease is often attended by feelings of dread and anxiety, not necessarily referring to the bodily health; and gastro-intestinal torpor is usually accompanied by gloom, depression, and irritability of temper.

The association of insanity with specific fevers has already been referred to. In all specific fevers delirium is common, and delirium is, of course, a form of insanity. When delirium occurs after the fever has declared itself and been recognised, it is easily estimated at its proper value; but when it occurs, as it sometimes does, in typhoid, typhns, smallpox, and other specific fevers, at the very outset of the malady

and before the rash or other distinguishing character of the disease has appeared, it is often regarded as simple acute insanity, and the patient is sent to an asylum, where the delirium subsides upon the appearance of the rash. The thermometer is the safeguard against such a mistake.

Phthisis is common among the insane, but apart from this, there is a variety of insanity often associated with phthisis and assuming much the same form in all the phthisical patients who become insane. The insanity often precedes the physical signs of phthisis, and it is quite possible to predict the onset of phthisis from the form that the insanity assumes, together with the general bodily condition. The form of the insanity is always that of sub-acute insanity with depression, and delusions of suspicion. The common form that the suspicion takes is that of being poisoned. The patient refuses food, and when the case is investigated, it is found that the refusal is based upon suspicion that the food is poisoned. The patient is feeble, languid, idle, and in addition is irritable, morose, and suspicious to an insane degree. All that is done for her (it is, I think, more frequent in the female) is misinterpreted and attributed to evil motives and machinations. The physical signs of phthisis are often not present in the lungs at first, but there are loss of weight, feeble circulation, coldness of the extremities, chilblains, deficiency of sleep, from the beginning; and when the physical signs do appear, they usually progress rapidly. In many cases, however, the course of the disease is protracted. The prognosis is bad, but patients occasionally recover from the insanity.

Gout is another disease which is occasionally, though

rarely, associated with a fairly distinct variety of insanity. The irritability and irascibility of gouty people, when their attacks of gout are impending, are proverbial, but when they become insane, the insanity no more partakes of the nature of the mental tone usually associated with the disease, than the insanity of phthisis reproduces the *spes phthisica*, or the insanity of pregnancy the longings and caprices of that condition. In the rare cases in which insanity has been definitely associated with gout, the form of the insanity has been that of acute depression.

Insanity is sometimes associated with uterine and ovarian trouble, and in insane women the menstrual period is usually marked by an exacerbation of the insanity, but no definite variety of insanity has been identified as characteristic of disease of these organs.

In myxœdema occurs a very characteristic set of mental symptoms, often amounting to insanity. The patient subsides into a mild degree of demeutia, with great sluggishness both of mind and of conduct. Thought is slow, memory is impaired, speech is slow, and all movements are very deliberate. This placid sluggish condition is sometimes varied by fretfulness and irritability, and then outbreaks of actual mania sometimes occur, and in these cases there may be delusions, usually of suspicion, and hallucinations. Myxœdema is greatly improved by thyroid feeding, so long as the feeding is maintained, and the mental symptoms usually improve and maintain their improvement along with the bodily; but they are very prone to relapse if the thyroid is discontinued.

PART III.

THE LEGAL RELATIONS OF INSANITY.

CHAPTER VIII.

THE LEGAL RELATIONS OF INSANITY.

There are four occasions on which a medical practitioner may be brought into contact with the law in dealing with insane persons:—

1. In the placing of an insane person under control.
2. In the keeping of an insane person under control.
3. In connection with the validity of wills and contracts.
4. In connection with responsibility for criminal acts.

The legal formalities necessary for depriving an insane person of the management of himself and his affairs, and for detaining him under care and treatment, differ much in different countries, and in each country in different cases. The procedure is different in England and Wales, in Scotland, and in Ireland.

In England and Wales

the procedure varies in the following circumstances:—

I. According as the patient is an idiot or a lunatic.

A person, who has been from birth or from early age idiot or imbecile, can be placed, under the provisions of the Idiots Act, 1886, in an institution registered under that Act, upon the certificate of one medical

practitioner, accompanied by a statement made by the parent or guardian of the patient. No order, judicial or other, is necessary, and the medical certificate is a simple statement in the following form :—

> I, the undersigned, A. B., a person registered under the Medical Act, 1858, and in the actual practice of the medical profession, certify that I have carefully examined C. D., an infant [*or* of full age] now residing at , and that I am of opinion that the said C. D. is an idiot [*or* has been an imbecile from birth, *or* for years past, *or* from an early age], and is capable of receiving benefit from [the institution (describing it)] registered under the Idiots Act, 1886.
>
> Dated . (Signed) .

II. When the patient does not come under the description of an idiot or imbecile from birth or from an early age, but has become insane in later life, procedure varies according to the following circumstances :—

1. If the patient is wandering at large, he may be arrested by the police and taken before a justice.

2. If the patient is not wandering at large, but either is not under proper care and control, or is cruelly treated or neglected by the relative or other person having charge of him, then it is the duty of the police and the parish authorities to give information on oath to a justice, who will then take the necessary legal proceedings.

3. In the ordinary case, in which the patient is living at home with his friends, the procedure differs according as he is or is not a pauper, by which is meant according as his means allow of his being treated as a "private" patient and of his support being paid for, or as his malady must be treated at the public

expense. It does not mean that he must be a pauper at the time of his certification as a lunatic, but that he becomes one by being certified at the expense of his parish.

If he is in this sense a pauper, the affair is managed by the relieving officer, and the only duty of the medical practitioner is to make a certificate, which is in the same form whether the patient is a pauper or a private patient.

If, however, the patient does not satisfy any of the foregoing descriptions, but is a private patient, not wandering at large and not cruelly treated or neglected, then there are three ways of placing him under control, viz. :—

The Judicial Reception Order,

The Urgency Order, and

The Inquisition.

The first is the ordinary and normal procedure. In order to procure a judicial reception order, a petition must be presented by the nearest relative of the patient to a magistrate specially appointed under the Lunacy Act, 1890; and the petition must be accompanied by a statement, also made by a relative, and by the certificates of two medical practitioners made independently of each other—that is to say, the certificates must be on separate sheets of paper, and the examination made for the purpose of certifying must be made "separately from any other practitioner."

The requirements of the certificates are simple and easily satisfied, but it is seldom that they do not contain some gross defect that could have been avoided by a little ordinary care. The majority of certifying practitioners do not even trouble to refer to all the marginal notes and to see that all are satisfied, nor

do they read through the certificate when made, to delete redundant words, and see that it reads grammatically and logically from beginning to end.

In making a certificate, its purpose must be constantly borne in mind. It is to satisfy the mind of the magistrate, a third person, who has never seen and knows nothing of the patient, that the patient is insane and a proper person to be detained under care and treatment as an insane person. Students usually make a certificate as if it needed to contain a diagnosis, or as if it were a clinical description of the case, and accordingly they put among the "facts indicating insanity" their observations on the knee jerks and the pupillary reflexes, and the age and complexion of the patient. If they would only pay attention to the terms of the document, and remember that what is required of them are "facts indicating insanity observed by myself at the time of examination," they would be saved from many absurdities. A medical certificate of lunacy has by statute the force of a statement made upon oath, and therefore should be drawn with the same punctilious care as an affidavit. The essentials of a good certificate are three :—

1. It should be sufficient—that is to say, the facts stated as indications of insanity should be such as to carry to the mind of the magistrate, who has never seen the patient and knows nothing of him, a conviction that the patient is insane. It is not enough for the certifying practitioner to satisfy himself on this point. He must so state his facts as to satisfy the magistrate, and he must remember that the magistrate has not the knowledge of the patient that he himself has. To the doctor, who knows well the circumstances of his patient, it is a fact indicating insanity when the

patient deplores his own poverty and ruin, or declares that his wife has deserted him. But to the magistrate, who knows nothing of the patient or his circumstances, these statements do not carry insanity, for, for aught he knows, they may be true. When the "fact indicating insanity" does not carry insanity upon the face of it, it should be supplemented by a statement that it is incorrect, and, if need be, by a further statement that the patient continues to hold it in spite of plain evidence to the contrary. That "he thinks his wife has deserted him" is of itself no evidence of insanity; but that "he thinks his wife has deserted him, although she was in his room ten minutes ago, and left it for the avowed purpose of posting a letter" is evidence.

2. The certificate should be definite. It should give "facts indicating insanity," not opinions which the certifier mistakes for facts. To say that the patient "feels miserable," that he "believes he has committed the unpardonable sin," that "he thinks he is king of the world" are not observed facts, but inferences from observed facts. What is actually observed is that the patient SAYS this or the other. Whether his mind is in accordance with his statement is a matter of inference, not of observation, and hence the statements in a certificate should be limited to what the patient says and what he does, and should not ramble into what he thinks and feels. Neither has the certifier any business to aver that the patient "cannot remember" this or "will not answer" that. All that he can observe is that the patient DOES not do what is required of him. Whether this defect is defect of ability or defect of will is beyond his power to determine. When you are giving evidence upon oath you must distinguish carefully between what

you observe and what you infer, and the observation alone can be legitimately stated as a fact.

3. Lastly, the certificate must be clearly expressed. Unless you are a master of English composition, keep your sentences short, and do without qualifying clauses. Above all, avoid entanglements with the personal pronouns. You are not bound to give any "facts communicated by others." If the facts that you yourself observe are sufficient to prove your case, there is no need of facts communicated by others. But if your own facts are weak and need corroboration, then you must reinforce them by communicated facts; and never forget, what is usually forgotten, to give the name, Christian names, address, and description of your informant. By the "description" is not meant, by the way, the complexion, colour of eyes and hair, etc., of your informant, but his rank in life, occupation or profession. Having given these particulars with respect to your informant, state the information that he gives you in as unambiguous terms as possible, making it clear to whom your pronouns refer. Here is a specimen of the kind of statement that ought to be avoided: "The patient states that he knew Mr. M. in Australia, and that he has often visited him at his house there, and that on one occasion he went into his house and ate the dinner that had been prepared for him." Who was the visitor, whose was the house, and whose the dinner are here left in uncertainty; and it is obvious that, on one reading of the statement, the fact that one man went into his own house and ate his own dinner is alleged as a reason why another man is to be considered insane.

The second method by which a "private" patient may be placed under control is by means of an urgency

order, but this method is purely a temporary expedient to obtain immediate control of a patient while the usual order by judicial authority is being obtained. It takes time to obtain a judicial reception order, and there are cases in which it is expedient that a patient should be placed under control at once. For these exceptional cases the urgency order is provided. By its means a patient can be placed under control within an hour or two, and the urgency order will remain in force for seven days, or if within seven days a petition for a judicial reception order is presented, then until that petition is disposed of.

The urgency order must, like the petition, be signed if possible by a near relative of the patient, and in any case the person who signs it must be of full age, and must within two days have seen the patient. It must be accompanied by *one* medical certificate, and by a statement of particulars similar to that which accompanies a petition. In addition to the medical certificate, which is in precisely the same form as those which accompany the petition, a further certificate must be given by the medical practitioner in the following form :—

> I certify that it is expedient for the welfare of the said A. B. [*or* for the public safety, *as the case may be*] that the said A. B. should be forthwith placed under care and treatment. My reasons for this conclusion are as follows : [state them].

By this means a case of acute mania can be got under control at once ; a patient who is taken ill in an hotel or a lodging-house, or who arrives insane on board ship, can be immediately taken to a place of safety.

The inquisition is a purely legal procedure, and the only function of the medical practitioner in connection

with it is to make an affidavit and to give evidence when called upon. It results in the appointment of a committee of the estate to admininster the financial affairs of the patient, and of a committee of the person to direct how the patient shall be cared for, and to be responsible for his personal welfare.

In Scotland.

Idiots and imbeciles under eighteen years of age may be received into training schools in Scotland without even the small formalities which are needed in England and Wales; but in practice all such cases are sent to such institutions as lunatics, with the usual formalities required for lunatics, in order that thereby the Government grant may be obtained. When above the age of eighteen and when sent to institutions other than training schools, idiots and imbeciles are classed as lunatics, and are subject to the same formalities

Insane persons whose malady is not confirmed may be placed in private care for a period not exceeding six months, under the certificate to that effect of one medical practitioner.

Insane persons, whether pauper or non-pauper, can be placed in institutions upon an order of the sheriff, which is obtained by petition, accompanied by a statement of particulars and the certificates of two medical practitioners. In the case of a pauper, the petitioner is the inspector of poor.

The English urgency order is paralleled by a certificate of emergency given by a single medical practitioner, and accompanied by a request from the person in the position of petitioner, to the superintendent of the institution, to receive the patient.

By *interdiction* a person who is prodigal or facile—that is, too easily influenced by others—can be restrained from alienating his property without the consent of guardians, called interdictors, who are appointed by the court. This provision has no parallel in English law.

The English inquisition is paralleled in Scotch law by the proceedings of cognition and curatory. The curator appointed by the court administers the estate of the lunatic, but there is no functionary correspouding to the committee of the person.

In Ireland.

The formalities differ according as the patient is to be taken to a district asylum or to a licensed or unlicensed house.

Pauper patients who are not dangerous require for their admission into a district asylum four documents:—

1. Declaration before a magistrate stating that the patient is insane and destitute, and giving the names, addresses, and descriptions of two relatives of the patient.

2. The certificate of a magistrate and of a clergyman or poor-law guardian that they have personally inquired into the case.

3. One medical certificate.

4. An engagement by the applicant to remove the patient when called upon to do so.

Paying patients who are not dangerous require for admission into a district asylum even more documents than the foregoing, viz.:—

1. A declaration before a magistrate that the patient has not snfficient means to pay for his support in a

licensed house, and has no friend who can do so; and stating how long the patient has been resident in the country.

2. The certificate of a magistrate and a clergyman that the case has been investigated.

3. One medical certificate signed by two medical practitioners.

4. An engagement to remove the patient when called upon to do so, and to pay a specified sum for his support.

5. The sanction of an inspector of lunatics.

As might have been expected, proceedings so cumbrous are in practice never employed, and practically all the patients in the district or public asylums of Ireland are admitted as *dangerous lunatics*, having been apprehended "under circumstances denoting derangement of mind, and an intention of committing an indictable offence," and removed by warrant from gaol to the asylum.

Into *licensed houses, charitable institutions and single care* in Ireland patients are admitted upon the following documents:—

1. An order by a relative or connection of the lunatic.

2. A medical certificate signed by two medical practitioners.

In cases of urgency the signature of a single practitioner is sufficient, provided that a second be added within fourteen days of the first.

The proceedings under *inquisition* are practically the same as in English law.

In connection with the placing of an insane person under control, and generally in connection with the

examination and investigation of cases of insanity, a warning must be given to the medical practitioner never under any circumstances to lend himself to deceit, or subterfuge, or cunning devices, in dealing with his patients. There is a practice, unhappily still too common, of regarding persons who are in any degree of unsound mind as if all the ordinary canons of truth and honesty were dissolved and obliterated in as far as dealings with then are concerned. They are apt to be looked upon as beings to whom everything may be lightly promised, and with whom no promise need be kept; who may be shamelessly deceived without the natural consequences of deceit being incurred. Such practices are utterly inexcusable, and ought on no account whatever to be resorted to. When a patient is to be examined with respect to his state of mind, the only fair and proper course to pursue is to explain to him, if he is sensible enough to understand the explanation, what the object of his visitor is in subjecting him to examination. And if it becomes necessary to remove him to an institution, the necessity should be pointed out to him, and he should be told where he is going, and why. If he objects, he should be reasoned with, and if reasoning and persuasion are of no avail, he must be told that, if necessary, force will be employed. Of course, if he is not sensible enough to understand, this procedure need not be adopted, but even then, no deceit should be employed to gain a temporary advantage at the certain cost of much subsequent trouble.

CHAPTER IX.

KEEPING UNDER CONTROL.

THE law with regard to the custody of insane persons is extremely stringent, and in these days, when every medical practitioner, while waiting for his practice to grow, seeks to eke out his income by taking a resident patient, it is important that this should be known. The terms of the Lunacy Act, 1890, are as follows :—

> "Subject to the exceptions in this Act mentioned, a person . . . shall not be received or detained as a lunatic . . . as a single patient, unless under a reception order made by a judicial authority," etc.
>
> "Every person who, except under the provisions of this Act, receives or detains a lunatic or alleged lunatic in an institution for lunatics, or for payment takes charge of, receives to board or lodge, or detains a lunatic or alleged lunatic in an unlicensed house, shall be guilty of a misdemeanour, and in the latter case shall also be liable to a penalty not exceeding fifty pounds."
>
> "Except under the provisions of this Act, it shall not be lawful for any person to receive or detain two or more lunatics in any house unless the house is an institution for lunatics or workhouse."
>
> "Any person who receives or detains two or more lunatics in any house except as aforesaid shall be guilty of a misdemeanour."

It is unlawful, therefore, to receive into residence a lunatic or alleged lunatic without a reception order,

and only one such patient can be received into a private house even with such an order. It matters not whether a profit is made or no. Last year a medical man was prosecuted for having, for payment, taken charge of his brother, an "alleged lunatic," for having, for payment, received him, and for having, for payment, detained him in an unlicensed house. It was proved that the Master in Lunacy was aware of and approved the arrangement, and it was proved that the income that the medical man received for his brother's keep did not cover the charges for him, but nevertheless the defendant was convicted of the technical offence. The important question, upon which the whole of the section practically hangs, is, What is an "alleged lunatic"? Without presuming to decide a legal point, it may be stated that, as far as can be at present ascertained, an "alleged lunatic" probably means a person who is certifiably insane.

If, therefore, a medical practitioner—or, indeed, any one else—desires to receive, for payment, a patient who is certifiably insane, it is absolutely necessary that he should refuse to receive the patient except upon a judicial reception order, otherwise he may find himself liable to severe penalties. He must remember, moreover, that when he does receive a patient under a judicial reception order, he is at once responsible for keeping statutory books and sending statutory notices and reports, that he must submit to have his house periodically visited and inspected, and his domestic arrangements criticised and reported upon, and generally that he will be under supervision, and responsible, it may be to more than one authority, for every detail in the treatment of his patient. The numerous duties of record and report cast upon the person who has charge

of a patient in private care are far too lengthy to set out here, and will be found in detail in "Lunacy Law for Medical Men" (Churchill) by the present writer.

CHAPTER X.

TESTAMENTARY AND CONTRACTING CAPACITY.

It may happen to any medical practitioner to be called upon to give evidence as to the capacity of a testator to make a valid will. It is not infrequent for the family medical attendant to be called upon to witness a will, and when he does so he should remember that he does not do so as an ordinary witness, whose attestation means merely that the signature of the testator was attached to the will in the witness's presence. When a medical practitioner attests a will, his attestation means, not only that the testator executed the will in his presence, but it means in addition that the testator was at the time of sound and disposing mind, and fit to make a will. The attestation of the medical witness is a certificate of competency given to the testator.

When there is any question of the capacity of a testator, the following are the points to which the examining practitioner should give his consideration :—

1. Does the testator understand the nature of his act?—that is to say, does he realise that he is making a disposition of his property to take effect after his death? Does he know whom he is benefiting and whom he is excluding from benefit, and the extent to which his legatees severally benefit under his will?

2. Does he understand and appreciate the nature and extent of his property? It is not essential, of course, that he should be acquainted with every detail if he is a man of large property, but he should have a general knowledge sufficient for the purpose.

3. Does he comprehend and appreciate the nature of the claims to which he ought to give effect?—that is to say, has he a clear knowledge and recollection of the existence of the persons that he excludes from his will, and of the relation in which they stand to him? Has he sufficient intelligence to compare the claims of different people upon his bounty? And lastly has he any such disorder of mind as shall "poison his affections, pervert his sense of right, or prevent the exercise of his natural faculties"? Has he such insane delusion as may "influence his will in disposing of his property, and bring about a disposal of it which, if the mind had been sound, would not have been made"? To vitiate the disposing power, it is not sufficient that the testator should suffer from delusion. Many insane persons suffering from delusions have made wills which have been upheld by the court. To destroy the "disposing mind," the testator must not only suffer from delusion, but the delusion must be of such a character as to influence him in the disposal of his property.

CHAPTER XI.

CRIMINAL RESPONSIBILITY.

The third occasion upon which a medical practitioner may be brought into contact with the law in dealing with an insane person is in connection with criminal responsibility. When the plea of insanity is raised in a criminal case, the question left to the jury is, Did the prisoner, at the time the crime was committed, know the nature and quality of the act that he was committing and that it was wrong? What amount of light the medical witness will be allowed to throw upon this question, supposing that he can throw any, will depend upon the discretion of the judge who tries the case, but the practice nowadays is for the judge to allow a very wide latitude to the medical witness, and for the latter to state his opinion very freely. In doing so he should, however, not allow himself to be influenced by any sentimentality or professional prejudice in favour of the plea of insanity, and there are certain practical precautions which it is his duty to take. In his interviews with the prisoner he should furnish himself with writing materials and take down the prisoner's statements in the prisoner's own words and in the prisoner's presence. He will then be entitled to refer to his notes in the witness-box in order to refresh his memory. He is, of course, entitled to record anything that the prisoner may say about the

crime and his share in it, and to ask him *consequential* questions arising out of these statements, but he must most carefully avoid asking the prisoner whether he committed the crime, or putting to him leading questions implying that the crime was committed by him.

APPENDICES.

53 Vict. c. 5.—Sched. D., Form 8.

CERTIFICATE OF MEDICAL PRACTITIONER.

In the matter of *Amos Snooks*,
of (a) *Larranaga Gardens*,
in the (b) *Bloomsbury, W.C.*
(c) _____
an alleged lunatic.

I, the undersigned, *Omicron Pie, M.D.*,
do hereby certify as follows:—

1. I am a person registered under the Medical Act, 1858, and I am in the actual practice of the medical profession.

2. On the *24th* day of *October*, 1901
at (d) *Larranaga Gardens*,
in the (e) *Borough* of *Bloomsbury, W.C.*
(separately from any other practitioner) (f) I personally examined the said *Amos Snooks*,
and came to the conclusion that he is (g) *insane*,

(a) *Insert residence of patient.*

(b) County, city, *or* borough, *as the case may be.*

(c) *Insert profession or occupation, if any.*

(d) *Insert the place of examination, giving the name of the street, with number or name of house, or should there be no number, the Christian and surname of occupier.*

(e) County, city, *or* borough, *as the case may be.*

(f) *Omit this where only one certificate is required.*

(g) A lunatic, an idiot, *or* a person of unsound mind.

Line 2. The number of the house is omitted.
" 3. "Bloomsbury, W.C.," should be inserted in the previous line. On line 3 the proper description is "County of London," or "County of Middlesex," Bloomsbury being in the former administrative county and in the latter geographical county.
" 4. The occupation or description of the patient is omitted. As he had retired from business, the entry should have been "of no occupation" or "retired civil servant."
Line 11. Number of house omitted.
" 12. See remark on line 3. Bloomsbury is not a borough.
" 15. The word "insane" is not permissible. The patient must be described in the terms of the statute, as a lunatic, an idiot, or a person of unsound mind.

and a proper person to be taken charge of and detained under care and treatment.

3. I formed this conclusion on the following grounds, viz. :—

(*a.*) Facts indicating Insanity observed by myself at the time of examination (*h*), viz. :—*He thinks that he is about to make a voyage round the world in order to collect butterflies. Will not answer simple questions. Suffers from delusions. Cannot remember recent events. Talking loudly and excitedly. Pupils irregular. Knee-jerks absent.*

(*h*) *If the same or other facts were observed previous to the time of the examination, the certifier is at liberty to subjoin them in a separate paragraph.*

(*b.*) Facts communicated by others (*i*), viz. :—*Mr. John W. Snooks informs me that he is very nervous and excitable, and sometimes gets up and knocks at his door at three o'clock in the morning and complains that*

(*i*) *The names and Christian names (if known) of informants to be given, with their addresses and descriptions.*

Lines 19 and 20. The statement as to what the patient thinks is not permissible. The examining physician can observe what he says only. Supposing that the patient does entertain the thought in question, it is not in itself evidence of insanity. That the patient *will* not answer simple questions is not a "fact observed," it is an inference. All that is observed is that he *does* not answer.

„ 20 and 21. "Suffers from delusions" is not explicit enough. A delusion should be stated and described. That he *cannot* remember recent events is an inference. All that is observed is that he does not appear to remember. Moreover, the statement is too vague. A specific instance of lapse of memory should be given.

Line 21. The examiner here unjustifiably passes from the indicative mood to the participle. The mere fact of talking loudly and excitedly is no evidence of insanity.

Lines 21 and 22. These particulars are irrelevant and redundant. They are not "facts indicating insanity."

Line 27. The second Christian name of informant should be given in full. His address and description are omitted. It is not made clear who it is that is nervous and excitable, who it is that gets up at three o'clock in the morning, whose door is knocked at, who makes the complaint, nor whose room the people are in.

*people are in his room.*_____

_____

_____

_____

4. The said_____ appeared to me to be___*or not to be*___in a fit condition of bodily health to be removed to an asylum, hospital, or licensed house (*k*).

(*k*) *Strike out this clause in case of a patient whose removal is not proposed.*

5. I give this certificate having first read the section of the Act of Parliament printed below.

(Signed)_____*Omicron Pie,*_____

of (*l*)____461, *Brook Street.*_____

(*l*) *Insert full postal address.*

Dated this_____*fourth*_____day of_____*November,*_____1901.

LUNACY, 8.

(53 Vict. c. 5, ss. 4, 11, 16, 28, 29.)

Any person who makes a wilful misstatement of any material fact in any medical or other certificate, or in any statement or report of bodily or mental condition, under this Act shall be guilty of a misdemeanour.—*Extract from section* 317 *of the Lunacy Act*, 1890.

(SEE ALSO NOTES ON FLY-LEAF.)

Line 33. Name omitted.
„ 34. Redundant words are not deleted.
„ 39. Address insufficient.

Line 40. The certificate is dated more than seven clear days after the date of the examination, and is therefore invalid.

APPENDIX B.

LETTERS OF INSANE PERSONS.

In many forms and varieties of insanity letters are never written. In other forms the writing of letters forms one of the chief occupations of the patient, and the letters are often very characteristic.

The two varieties in which the writing of letters is most characteristic are general paralysis and paranoia. In sub-acute mania also, the letters written are often very numerous.

In the early stage of general paralysis, the letters are very numerous, and have the characteristics already described. They very often contain orders for the purchase of goods in great quantity. In paranoia, the writing of letters is usually a very prominent symptom, and the letters are often of an extremely insane character when little or no indication of insanity can be obtained from the conversation of the patient. The letters sometimes, but by no means always, contain references to the persecution from which the patient believes that he suffers. They are sometimes neat and tidy, but more often are written anyhow—first a body of writing down the middle of the page, then the margins are utilised, then the writing is crossed, and perhaps recrossed and interlineated. When all the paper has been

occupied in this way, ragged scraps are added, old envelopes are utilised, margins of newspapers, pages torn out of books, bits of paper bags, anything in the shape of paper, and finally the letter is concluded on the flap of the containing envelope, and often on the outside of it also. The handwriting is usually very bad, often illegible, and when deciphered, the confusion of thought so characteristic of paranoia is very conspicuous—more so, usually, than it is in the conversation. Often there are long strings of words from which no meaning whatever can be extracted. Sometimes the manuscript is varied by sketches, or by mysterious symbols and diagrams. The letters are usually written to prominent people with whom the patient has no acquaintance—to the sovereign, to the Secretaries of State, to foreign potentates, to prominent politicians, philanthropists, actors, athletes, to any one whose name is mentioned in a newspaper.

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